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ORIGINAL COMMUNICATIONS.

ON INJURIES TO THE EYE FROM SHOT, Etc.

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There is a class of injuries to which sportsmen are especially liable, and which medical men are sometimes called upon to treat under circumstances the reverse of favourable. Upon these I propose to offer a few observations.

Cover shooting is a frequent source of injuries to the eye, from the circumstance of small shot being very liable to glance from the branches of trees in unexpected directions, and also from the eagerness of some sportsmen, who cannot resist a tempting shot, regardless of the proximity of others, whereby many persons have been blinded for life. Fragments of copper caps are another source of injury to these organs, though less frequently so than formerly, from the superior make of the caps themselves, and of the gun-locks; and, lastly, the eyes may be punctured or lacerated by thorns.

Injuries from Shot. The external effects produced upon the eye-ball by a shot-pellet are, according to my observation, three in number. If the shot be spent, it will bruise and not penetrate the eye, causing considerable ecchymosis externally, and not unfrequently paralysis of the retina. If the eye be struck obliquely by the round pellet, it will glance off, cutting a little furrow which marks its course; but if the eye be struck point blank, or if the shot has been flattened or jagged by previous collision, the tunics will probably be penetrated, and the shot will lodge in the interior of the globe. The peculiarly tough structure of the sclerotic offers great resistance to the progress of a shot; hence, it frequently glances off altogether, if the outer side of the eye be struck, or lodges in the orbit, if the inner side. Those cases, in which a grain of shot pierces the eye, (except when fired at a very short distance), appear to be most frequent when the lid is struck in the first instance; as, for example, by a shot glancing downwards from the branch of a tree. Much, however, will depend on the angle of incidence and on

the velocity, whether the sclerotic be penetrated or not. The following is an illustration of the first description of injury.

Case. A man, æt. 32, was acting as "marker" to a party of sportsmen, and had ascended a tree to obtain a good view. A covey of partridges rose between him and the gentlemen, who were distant about one hundred yards, and on their firing at the birds, several shot struck about him, and one hit his left eye: the pain was at the moment acute, and the sight greatly impaired. He came under my notice two days afterwards, and I found considerable ecchymosis over two-thirds of the sclerotic, but no breach of surface. The frequent application of cold and astringent collyria speedily removed all traces of the blow; and the sight was gradually recovered.

Of injuries arising from over-eagerness, three examples have been seen by me; but as the main points were similar in all, the brief recital of one case will suffice.

Case. A party were beating a wood for pheasants, and in the excitement of several birds rising, a gentleman shot at one, without observing that another sportsman was in the line of fire. Three shot struck his face, and his left eye received one. As a wound in the eye was visible, great alarm was created, and medical assistance was promptly obtained. The impression was, that the shot had lodged in the globe, and such was the belief when the case was seen by me, some days subsequently. On careful examination, however, the groove which marked the course of the shot was clearly discernible: the eye had been struck about a line from the margin of the cornea, and there was quite the appearance, under a lens, of a piece having been chipped out. This was so far satisfactory, showing that the shot was not, as supposed, buried in the eye, and a fine probe, which traced the bottom of the wound in the sclerotic, rendered this certain. There was rather a smart attack of inflammation, but the case eventually did perfectly well.

When the eye has been struck by a shot, there is generally considerable ecchymosis, and the patient is much frightened; but our prognosis may be favourable if no shot-hole is visible, or if, by the assistance of a lens, the little groove above described can be discerned, though perhaps obscured by the effused blood; if, however, vision has been extinguished by the blow paralysing the retina, a cautious opinion, as to the restoration of vision, is advisable. The following case is interesting, from the severe effects produced by a small particle of gravel forcibly propelled against the eye; effects resembling those attendant on a shot-wound, which, for a time, it was believed by the patient to be.

Case. On the 18th of July, 1851, I was requested by Dr. Archibald Cockburn of Kensington, to visit a gentleman who had met with an accident on the previous day. He was playing at cricket with his sons, and a small fragment of gravel was struck up either by the bat or ball, and driven against his right eye with such force, that vision was instantly extinguished. The agony was intense, and the gentleman felt convinced that he had been shot. The most judicious treatment had been adopted by Dr. Cockburn; but, in spite of leeches, fomentations, etc., the pain continued, though in a less degree, and the patient passed a feverish and restless night.

On examination, much ecchymosis and considerable inflammation,

involving the sclerotic and iris, was apparent; the pupil was dilated and motionless, and the iris tremulous. Just at the junction of the cornea with the sclerotic at the inner side, a cut about a line in length was visible; and a gap at the ciliary margin of the iris at the same spot indicated that that membrane had been torn from its attachment. The pupil was displaced downwards and outwards, and a hand held up could be scarcely discerned.

Active antiphlogistic treatment was adopted, and every endeavour made by inunction and internal administration, to bring the patient under the influence of mercury. No effect, however, was produced, and the following report from Dr. Cockburn leads me to fear that the result of the case will be unsatisfactory. "I saw little of him after you went out of town, as he got impatient and used the eye freely, and went out against my warnings. He was never salivated, though he took a good deal of calomel. The eye was not improved, and he could barely distinguish my figure in the room; the pupil remained very dilated and angular."

When a shot penetrates the eye and lodges in the globe, the consequences cannot fail to be most serious. The following case occurred in the practice of Dr. Butter of Plymouth.

Case. A gentleman, aged 50, was struck by a shot in the left eye, and instantly lost the sight. His sufferings during the succeeding fortnight were not great, but then, and from time to time, during the four years and a half which preceded his application to Dr. Butter, the most agonising pain would shoot, like a flash of lightning, through his left eye and his head; and his sufferings, together with the disturbance produced in the vision of the other eye, led him to seek relief from operative measures. On the 9th of September, 1831, Dr. Butter extracted the lens of the injured eye, and found it to consist of calcareous matter and bone; some gritty matter was also syringed out, but no relief was afforded, and on the 23rd of February, 1833, Dr. B. proceeded to make another attempt to extract the shot. A portion of sclerotica was removed with scissors, and an aperture made sufficiently large to allow of the exploration with a probe of the cavity of the eye, the vitreous humour being evacuated; still no shot was found, nor was there alleviation of suffering; and, as a last resource, it was determined to extirpate the eye, which severe operation was performed on the 23rd of the following September. On the parts which had been removed being examined, a duck-shot was found impacted so firmly in the optic nerve, just at its junction with the retina, that some force was required to detach it. Ultimately, the case did well.

If the shot can be seen in the anterior chamber, there can be no hesitation as to the propriety of extracting it by an incision through the lower part of the cornea; but if it be hidden in the globe, all unnecessary poking or probing is to be strongly deprecated; no possible advantage can result from stirring up the vitreous humour with a probe in the hope of finding the shot, and such a proceeding cannot fail to deprive the patient of the faint chance of recovery he otherwise has. Under such circumstances, the room should be darkened, and the most absolute quiet enjoined; the head should be well elevated, and not allowed to move; the eye should be equally motionless, and the sound eye ought to be closed with a strip of plaster, to prevent

the other opening from sympathy; rags dipped in cold water should be applied to it; the bowels should be freely opened, and depletion practised according to the age and constitution of the patient.

Shots may lodge in the orbit: and when there, they give rise to distressing neuralgia, and have even caused symptoms of inflammation of the brain. The following case, which came under my notice some years ago, is remarkable, as showing by what a small body death may be caused, when the bones of the orbit are penetrated.

Case. Some children, in the neighbourhood of St. Bartholomew's Hospital, were playing with a sixpenny brass cannon, and to increase the report, had loaded it with a small piece of tobacco-pipe, scarcely bigger than a duck-shot. A little girl was standing a few paces from the muzzle of this toy, and when it was fired, she fell, and was carried into the hospital—dead. I was a student at the time, and have a vivid recollection of the embarrassment felt to account for the fatal result, as no wound was apparent; at length a speck of blood was noticed at the inner corner of one of the eyes, and on close examination, an insignificant puncture was discovered just within the lids. *Post-mortem* examination showed that the missile had struck that spot, glanced along the eyeball, and passing through the roof of the orbit, had buried itself deep in the substance of the brain.

Injuries from Fragments of Copper Caps. Fragments of copper cap will sometimes strike the eye and inflict serious wounds, of which I have seen several examples. Such cases were of frequent occurrence from imperfection in the construction of these implements when first invented, but they are less numerous now, and more frequently arise from exploding caps with a hammer, than from their legitimate use.

A young gentleman, aged 14, at one of the large public schools, was amusing himself and some schoolfellows with exploding copper caps by striking them with a hammer. A fragment struck his left eye, cut through the upper lid, and inflicted a formidable wound on the globe, immediately above the cornea. Medical assistance was obtained, but the youth concealed the truth, and stated that the wound was caused by a fall. The truth became known some months afterwards; and then the question arose, as to whether the fragment of the cap had remained in the eye or not, especially as a yellowish object was indistinctly visible in the wound. I saw him in June 1848, when the condition was as follows;—the globe was reduced in size about one-fourth, soft and boggy; the iris tremulous; the pupil was dilated and motionless, and vision was so far extinguished that there was barely perception of light. The wound in the sclerotic was filled by semitransparent material, through which a yellowish substance was perceptible. My first impression was that this was metallic; but on careful examination, with a lens and by a probe, I satisfied myself that such was not the case, and that it was merely coloured lymph. Although the eye had been acutely inflamed at the time of the accident, it had become quiet, and had been free from pain for some weeks. This circumstance, combined with the result of the examination, led me to conclude that the fragment of copper was not in the eye; restoration of vision was, however, hopeless.

Mr. Crompton, of Manchester, has detailed[1] the symptoms resulting from the presence of a fragment of copper in the eye, and my experience entirely accords with that gentleman's. The wound is generally clearly incised, heals rapidly, and for a period, varying from a few days to a month after the accident, the patients appear in a fair way of recovery; but at the expiration of that time, they are commonly suddenly seized with most acute pain in the eye, attended with extensive chemosis, swelling and redness of the lids, and frequently haziness of the cornea. The pain and acute symptoms may gradually subside, but will surely recur again and again, until the eye is brought into a state of chronic irritation, most distressing to bear, and not unfrequently leading to sympathetic irritation in the other eye, which may extend to destruction of vision.

The following is the plan of proceeding adopted by Mr. Barton, in whose practice seven cases occurred. It is equally applicable to a pellet of shot, or a fragment of copper cap, rolling loose in the eye.

The patient being placed in a convenient position, a large flap of the lower part of the cornea is to be cut as in the operation of extraction, but it must then be snipped off with a pair of scissors. The operation being acutely painful, and the eye irritable, chloroform may be advantageously employed. A linseed meal poultice is to be applied, and we may pretty confidently expect to find the foreign body in the poultice in the course of a few days; of course collapse of the globe is the consequence of the operation, but the disfigurement may be remedied by an artificial eye.

A shot becomes discoloured, and a fragment of iron is oxidised by remaining for some time in the eye, but the copper undergoes no change, and its edges continue as sharp and angular as at the moment of its entrance.

In the case above mentioned, the diminution in the size of the globe was a marked feature; and this is a common result of laceration of the sclerotic by a shot or a fragment of metal. The consistency of the vitreous humour is gradually lost at the same time that it becomes diminished in quantity. The colour of the iris is altered, and the membrane becomes tremulous; the globe shrinks to from one-fourth to one-third of its natural size, and as a visual organ the eye is rendered useless. If, however, the cornea be penetrated by a fragment of metal, it may fall into the anterior chamber, of which a case was related by me in the *Lancet* of 30th December, 1843; or it may pass through the iris, produce cataract by opening the capsule of the crystalline, and lodge deep in the eye. Dr. Mackenzie has repeatedly seen grains of powder propelled through the cornea into the lens, so as to cause cataract; and one case was very remarkable. A grain of powder, propelled through the cornea, traversed the lower part of the iris, in which it left a considerable opening, and striking the lens, produced cataract. Gradually the opaque substance cleared away behind the false pupil, and vision was restored. The natural pupil remained much longer cataractous, but at length it also cleared, and the patient saw well with a cataract glass.

A very remarkable case of recovery from a gun-shot wound of the

[1] London Medical Gazette, vol. xxi, p. 175.

eye is related by Professor Stœber of Strasburg, in the third volume of the *Annales d' Oculistique.*

Case. A child, seven years of age, was stealing fruit in a garden, when the owner fired at him, and wounded his right eye. The man was brought before the authorities, and declared in his defence, that the gun was only loaded with salt. Two experienced surgeons, after making an examination of the eye, reported that the wound had been more probably caused by salt than by lead. The man therefore escaped with a fine of twenty-five francs. Nearly a year afterwards, a foreign body was observed under the lower lid, on depressing which, a round black substance was discovered. The child was then brought to Professor Stœber, who found that the body in question was evidently a grain of shot, and that it was freely moveable between the conjunctiva and sclerotic, at the lower and outer part of the eyeball. There was a mark of a wound at the lower and outer border of the cornea, and corresponding to this, a circular lacerated opening in the iris. The pupil was immoveable, and vision was reduced to the mere perception of light.

The mother stated, that the eye frequently became red and painful, especially at changes of weather; and Professor Stœber considering that this irritability arose from the presence of the shot, decided to remove it, but was utterly foiled on several occasions by the restlessness of the child. The shot remained; nevertheless the eye gradually recovered, and sight returned to such a degree that very small objects could be discerned, though it never became as strong as the sight of the other eye. This case is highly instructive, showing that an amaurosis, nearly complete, and of more than two years' duration, can be removed by the unaided efforts of nature, notwithstanding the presence of a foreign body, which might have been expected to have kept up perpetual irritation. Such a result, though scarcely to be hoped for, offers encouragement in similar cases.

When there is a wound in the upper eyelid from any missile, it is important to ascertain whether the eye has been injured, a circumstance which may be overlooked by the attention being confined to the more conspicuous laceration. There may be a fragment left under the lid, or a wound in the upper part of the sclerotic, or even a fragment sticking in the coats of the eye. Demours mentions a case of this sort, where a double grain of shot passed into the sclerotic and remained fixed, one grain being without and the other within. The proper mode of proceeding is to direct the patient to look on the ground, and then to raise the lid by drawing up the integuments with the point of the finger towards the brow: a view of the sclerotic may thus be obtained; but if there be reason to suspect the presence of a foreign body between the eye and the lid, the latter should if possible be everted, or if this cannot be done, a stream of tepid water should be thrown under the lid by means of a syringe, whereby the substance will most probably be washed out.

Injuries from Thorns. These are far from uncommon in the country. If the thorn has penetrated the sclerotic, it should, if entire, be carefully drawn out; but if it has been broken, it becomes much more difficult to remove. I have had one such case, and the plan adopted

with success was as follows: having bound up the sound eye, and fixed the other with the points of the fingers of my right hand, a slight superficial incision was made with a sharp cataract needle on each side of the thorn, then with a pair of fine forceps it was grasped and smartly twitched out: the eye did perfectly well. A common consequence of a thorn striking through the cornea, is traumatic cataract; and it is singular to observe the rapidity with which opacity of the lens takes place. The injury is often followed by instant blindness; but that cannot arise from the mere injury to the lens, though I have seen it distinctly turbid one hour after it had been pierced by a thorn. This injury is attended with more pain than a gun-shot wound, and the subsequent inflammation is often of great severity.

Case. Mr. Thompson, residing near Ashbourne in Derbyshire, was struck by a thorn in the left eye on the 24th of February 1851, and instantly lost his sight. His right eye had been rendered blind twelve years previously by a wound from a fragment of iron. Severe inflammation followed both accidents; but though it was subdued in the eye last injured by the judicious measures adopted by Mr. Gregory, of Youlgrave, the patient continued blind. He was placed under my care last July, his condition being as follows:—the right pupil was blocked up with a mass of lymph strongly adherent to its margin, and it was drawn upwards and inwards; from the concavity of the iris, it was clear that the lens was no longer in existence. The left eye presented adhesions of the pupil to a soft capsulo-lenticular cataract. On the ninth of July, I opened the capsule in this eye, disturbing the lens but little; and not the slightest inflammation followed.

Professor Jäger, of Vienna, was then staying with me, and on the 20th of July he operated at my request on the right eye of Mr. Thompson; making a free incision through the sclerotic, he then introduced a pair of fine forceps, acted on by a spring, behind the iris, the opaque and very tough capsule, and seized and drew it out. For five days the progress of the case was everything that could be desired, but on the evening of the sixth day, violent inflammation set in, and in spite of the most active treatment, the pupil became closed again with lymph. Mr. T. returned into the country, and I did not see him until the 1st of October. On examination, it appeared that the cataract had entirely disappeared from the left eye, and there was vision through a small opening in the capsule. This was enlarged on the following day with a cutting needle, and he can now see very satisfactorily. It is proposed to make a central aperture through the lymph occupying the pupil of the right eye, when the organ is in a fit state for the operation.

A case once came under my notice, where the *hook* of an artificial fly had caught in the conjunctiva of the eye and had passed through the lid, just at the outer canthus: clumsy attempts had been made to extricate it, and a very awkward lacerated wound was the result. What should be the proper mode of proceeding in such a case? Obviously to push the hook forward until the barb is fairly exposed, then to snap it off with pliers or forceps above the barb. The shaft can then be withdrawn with ease.

There is one point with reference to wounds through the cornea to

which it is proper to direct attention. The immediate consequence of opening the anterior chamber is escape of the aqueous humour, whereby the iris, losing its support, falls forward, and is exceedingly liable to become entangled in, or adherent to, the wound, whereby the pupil becomes distorted, diminished in size, and incapable of performing its proper movements. Should this speedily ensue, the iris may often be disengaged by placing the patient before a window, and suddenly opening the eye; the natural action induced is powerful contraction of the iris, which draws it out of the wound. It is recommended by many writers to push the protruded part back with a probe; but so far as my experience extends, the bruising of the membrane by this proceeding is highly objectionable, as tending to excite iritis. The exposure to light three or four times, and belladonna subsequently, are at least safer, and probably quite as effectual as the other plan. An elegant mode of keeping the pupil dilated, is by rubbing upon the brow a solution of four grains of sulphate of atropine in half an ounce of glycerine. This is a more cleanly application than extract of belladonna; and it does not dry so readily.

In conclusion, I venture to offer the following remarks. If a surgeon be called to an injury of the eye, the organ should be carefully and gently cleansed from all blood and coagula, and once for all, fairly and thoroughly examined. This can be done with ease, and little pain at first; but if delayed till inflammation has set in, it will become both difficult and hazardous. If there be a foreign body in the eye, no time should be lost in extracting it if possible; if not, the patient should be kept quiet in bed, subjected to the strictest antiphlogistic discipline, and carefully watched. It should never be forgotten that the integrity of the organ depends on the *prevention* of inflammation, and that this is chiefly to be accomplished by the measures adopted within the first three days after the accident. The condition of the lids will be the criterion of the state of the eye; so long as they remain free from tumefaction and natural in appearance, all is going well; but not so, if a little puffiness appear at the internal angle, and gradually steal over the upper lid. There will then be some uneasiness in the eye, and the patient will complain of annoyance from scalding tears. If active measures have not been before adopted, not a moment should now be lost in resorting to them. Time is precious, inflammation is commencing, and every effort should be made to arrest its progress. The patient, if robust, should be bled from the arm, cupped from the mastoid process, or leeches may be applied there or to the temple. The cold wet rags must give place to frequent fomentations with hot water, and mercury, combined with a sedative, should be administered.

Such are the main features of treatment; but too much attention cannot be paid to the apparently minor points of absolute quiet, strict discipline, gentle handling, and little interference with the eye by opening it unnecessarily; and lastly, general careful watching on the part of the surgeon, that if mischief be threatened, it may be arrested at the very outset.

19, Berkeley Square, October 1851.

ON THE OBSTETRIC USE OF ERGOT OF RYE.

By GEORGE E. ELY, M.D.

(*Read before the Western Medical and Surgical Society of London, March* 7, 1851.)

In the brief remarks which I am about to submit, on the employment of Ergot of Rye in Parturition, I propose to offer the conclusions to which experience has led me, and do not profess to furnish either novel facts, or exact deductions from numerical details. Having been busily occupied in this department of practice for the last sixteen years, during which time I have personally delivered nearly 3,000 women, I have had ample opportunities for testing the maxims of my old preceptor, Dr. John Thatcher, of Edinburgh, on this point, and have never found them fail me. So little title to originality have I to boast of, that it would not have occurred to me to write at all on the subject, did not the cases which I read in the journals, and those which I occasionally see, convince me that many practitioners hold very loose opinions on the properties of the remedy, expecting from it more than it can perform, and exhibiting it when it can be potent only for evil. If a labour prove tedious, no matter in what stage of its progress, no matter what the cause of delay—and in spite even of faulty presentation—ergot appears by some to be given. In fact, *this* appears to be their only rule:—if labour is not terminated in half an hour after their arrival, a dose of ergot is to be administered. I have known it given,—by those who are well educated, and in other departments skilful,—in primiparæ, long before dilatation of the os uteri; and that even when the breech has presented. And I have known it to be given, with the head above the brim of the pelvis, the latter being deformed so much as to have made craniotomy necessary in former labours. Others, again, not knowing its proper adaptation, have denied it all power. Others, judging from the mischief arising from its improper administration, decline its use altogether, from a fear of its ill effects. But while, given wrongly, the consequences to mother and child may be most disastrous; if given rightly, it will often render operations with the forceps, or turning, unnecessary; and in some descriptions of hæmorrhage, may be the means of averting even death itself.

A consideration of the *action* of ergot, will render distinct and evident its nature as an obstetric instrument; and thus its powers, uses, and unsuitabilities, may be at once deduced. We may thus, also, see how and why it has occasionally been productive of ill effects on the mother or the child. I am not competent to enlarge on the minute physiological theory of its action. I speak as a man who professes medicine only as a practitioner; not, however, meaning hereby to undervalue a branch of science of which he confesses himself not a master.

The effect, then, of ergot of rye, given during labour, is to produce, in about twenty minutes after its administration, *propulsive contraction* of the uterus; differing from the natural expulsive pains in this re-

spect, that the intervals of ease will be either altogether absent, or very incomplete. Occasionally, if there is but little opposition, it will be a very powerful and continuous pain; or, on the other hand, it will be a quiet, tonic, slow, and steady propulsion, causing little or no expression of suffering, and lasting some time.

We see, then, immediately and exactly, the sort of case to which it is *suited*, and the sort of case in which it is *needed*. We see also how, when it is improperly administered, the serious consequences which have been ascribed to its use may really ensue. They must be, in a word, cases in which *a few strong expulsive pains* are required, and will be safe. The required pains must be *few;* for many ergotic pains, not having intervals, might rupture the uterus, or asphyxiate the child. It must be a case where *strong* expulsion is not undesirable, for the contractions resulting from ergot may be very strong.

In the first place, then, there must be no disproportion between the maternal pelvis and the fœtal head, for here a few pains and a short time cannot suffice. Therefore ergot is not to be used in any difficulty case. It must not be given before the os uteri is well dilated. It cannot, therefore, be suitable in the *early* stages of labour at all; far less, when the very cause of delay resides in rigidity of the os. It must not be given unless the vagina and perinæum are soft, moist, and well relaxed:—it can, then, be very rarely safe in primiparæ, especially if advanced in life. It cannot be applicable, unless the presentation is entirely favourable.

These rules appear so self-evident as to make it idle to repeat them. Yet I have seen them grossly transgressed; and I have often read in the journals, cases in which the authors narrate the exhibition of ergot under such circumstances as are deprecated above, without appearing at all aware of any impropriety in their treatment. If it is given in a case rendered tedious by the difficulty, nature will sometimes, fortunately, prove insensible to the action of the drug. But if not, the uterus will be roused to a violence of action, which will in all probability end in rupture: or if it should by fearful efforts accomplish delivery, the convulsive rigors which follow are tokens of the imminent risk which has been run.

When there is rigidity of the os uteri and soft parts, results so fatal may not occur; but the patient will become exhausted by misplaced and ineffectual attempts at expulsion; the rigidity and dryness will increase; a feverish state will be produced; and, after the subsidence of ergotic pain, natural pains will be slow in returning. And such are cases in which I have seen ergot fatal to children, whose vitality has not been proof against the long-continued and unremitting compression.

Probably none will be found so mad as to administer ergot in presentation of the *upper* extremity. But neither is it applicable to a foot or breech presentation; for here it is often only after the slow, gradual, and dilating passage of the hips, that we can hope to extricate the head sufficiently speedily to save the child. Even where the *head* is the presenting part, malposition will often forbid the use of ergot; as that would frequently be an infringement of the maxim,—that *few* pains must be requisite for the completion of labour.

I must also confirm that which Dr. Hardy, of Dublin, in an interesting and important paper on this subject, has stated; that ergot will sometimes produce very serious depression of the pulse, where the patient has already been weakened by very great hæmorrhage, or previous profuse diarrhœa.

After what I have said, few words will suffice for pointing out in what cases ergot is a suitable means. And if from those in which it may be given safely, we subtract those in which it is not required, very few will remain. I myself so seldom require it, that I have never carried any about with me. Doubtless, there are many cases where no possible harm could arise from its administration, and where the suspense of the patient, and the time of the accoucheur, may be unobjectionably spared by employing it; but my own custom on such occasions is, to submit to the tediousness and inconvenience, and exhibit simply "tincture of time". Herein, every one must act as he thinks right.

But when, in a woman who has already been a mother, the head has rested on the perinæum for two or three hours, waiting only for the final extruding pain, it is folly to withhold what will then be so speedy, so safe, and so welcome an interference. And I have known that, occasionally, in elderly women, where only *one* pain is wanted, that one pain *will* not come; and either ergot must be given, or the forceps at last applied.

In cases where, in the last stage of labour, the expulsive pains are feeble and infrequent, serious hæmorrhage will very often follow; and this untoward sequence is almost always to be prevented by the exhibition of ergot, in the manner proposed by Dewees, and so ably expounded by Dr. Beatty, of Dublin.

But the case in which ergot is most strikingly beneficial, and I may say most necessary, is that of partial presentation of the placenta. Here, until the os uteri is considerably dilated, the hæmorrhage can only be stayed by the plug, which will do so effectually. But when the os is tolerably open, thin, and soft, the yielding surface of the membranes will not afford a counter-pressure to the plug, which is then no longer efficient. They may also give way without our knowledge, and then we shall have internal hæmorrhage. If we now rupture the membranes, the descent of the head will so compress the lacerated vessels, as to place the patient in safety. But we cannot depend upon the continuance of sufficient contraction of the uterus to keep up this compression; and the intervals of pain will permit a considerable draining. Here, then, if the symptoms are urgent, there would be no remedy but turning; a measure painful and exhausting to the mother, hazardous to the child, and perhaps difficult to the operator. But ergot supplies, as I can aver, an admirable and a competent aid. Let a full dose be given, and the membranes ruptured, and the happy results will be, a cessation of hæmorrhage and a speedy delivery; or, at all events, such a degree of tonic contraction of the uterus will ensue, as will keep the patient out of danger.

Dr. Ramsbotham recommends the administration of ergot as a preliminary step in the induction of premature labour. In the few cases of this kind which I have treated, I have derived no assistance from

it; and I do not think that the non-parturient womb is very susceptible of its stimulus. Nor can I say that I have found the ergot very effective, when given after delivery, in atonic hæmorrhage; although I willingly defer to the contrary opinion held by many distinguished accoucheurs.

Rochester, February 1851.

ON THE RELATIONS OF UTERINE TO CONSTITUTIONAL DISORDER.

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Of those who have devoted themselves to the study and investigation of morbid phenomena, we may recognize two principal classes. The one, looking more especially to the alterations of structure which are occasioned by disease, endeavour to deduce from them and the study of their specific characters, anatomical, chemical, and physical, the laws which regulate their development, and the principles which should guide us in their prevention and cure. The other, looking beyond the mere structural changes themselves, seek to determine their mode of origin and formation by an examination of their causes, the circumstances by which they have been preceded, and the order and sequence of morbid actions. Each of these methods of inquiry has its advantages, whilst both are conducive to the extension of medical science; and while it would be invidious to draw any parallel between their respective merits, we may at least admit the importance of that which, by teaching us the incipient phenomena of disease, enables us to anticipate and avert those ulterior changes of structure which, when met with, are but little amenable to the resources of our art.

But in such investigations, it is necessary to carry our inquiries beyond those limits which custom or system has arbitrarily assigned to particular diseases. It is necessary to study closely the first deviations from health; to trace morbid actions from their more determinate to their more primitive conditions; and to note the order and succession of changes by which constitutional disorder becomes localised, and local disorder passes into organic disease. For it is too evident, that morbid action may have commenced before sensibility warns us of its existence, and that the mere perception of pain or uneasiness, or, indeed, of any sensible deviation from what is normal in a part, cannot be regarded as the commencement of disease. This may have begun long antecedently; and inquiry in such cases will often show that it had been attended by appropriate symptoms, which, if carefully sought

for and recognised in other instances, would enable us to avert those consequences which would otherwise ensue.

In the prosecution of this subject, much may be gained from physiology, for it is to the point at which physiological actions become pathological, that our inquiries should be mainly directed. Much, again, is to be learnt by collecting the histories of individual cases; and this should comprehend, not only their immediate symptoms and causes, but their remote antecedents also. By studying the particular circumstances or combination of events, which may have preceded or given rise to any particular lesion, we are enabled to anticipate its occurrence whenever similar circumstances cooperate; and this knowledge is eminently equivalent to power; with such power, medicine may claim to rank foremost among those sciences which have contributed most largely to the happiness and welfare of mankind. The knowledge of the past becomes our guide and security for the future; and in proportion as we have diligently watched and followed and correctly interpreted the workings of nature, are we enabled to direct, to modify, or control them, and thus to minister most successfully to the wants and necessities of our fellow creatures.

The relations which subsist between uterine and constitutional disorder have not, as it appears to me, been satisfactorily determined, nor have they received, perhaps, that degree of attention which the importance of the subject merits. According to the most recent doctrines which have been put forward, uterine disorder is sufficient to take the initiative in all those morbid conditions, constitutional as well as local, which are met with in the progress of uterine disease; and consistently with this view, the rule of practice has been to direct measures primarily and specifically to the uterine organs. The precise nature of the uterine malady has not, indeed, been clearly settled;—by one it is considered as congestive, by another as inflammatory and ulcerative, by a third as neuralgic, and by a fourth as a kind of mechanical displacement; but all agree in regarding it as of primary importance, and as the *fons et origo* of any coexisting disorders. Whether, however, such views are correct, or, at all events to the extent which has been contended for by some, may, I think, admit of reasonable doubt. I do not deny that uterine disease, when fully established, may react injuriously upon the constitution, or that some organs may suffer in the general reaction more than others; but if our inquiries are directed to the early history and mode of origin of such diseases, we shall find, I think, many reasons for believing that this is constitutional rather than local; that, whilst irritative disorder has preceded vascular disease, that this has mainly resulted from constitutional causes, and that it is less the reaction of the uterine malady upon a healthy than upon a disordered constitution, which gives rise to those complex and often intractable maladies which are sometimes met with in connexion with uterine diseases. The question involved in this inquiry is one of considerable practical importance; for if, on the one hand, it should appear that uterine disorders are for the most part local and isolated affections, and arise irrespective of general causes, it must follow that treatment of a local character, if not exclusively, must be chiefly required, and that the constitutional disorder will cease with

the uterine. If, on the other hand, it is true that uterine is generally preceded by constitutional derangement, and is mainly dependent upon it; then it must equally follow, that treatment, to be successful, must be addressed principally to the latter, and more subordinately to the former.

Those who have adopted the first of these views, and who look to uterine derangement as being for the most part idiopathic, and as initiating other disorders, and who regard the cervix uteri as the chief seat of the majority of uterine diseases, would seem to attach primary importance to the physical appearances which it presents under difficult circumstances, and have associated with many of them the presence of inflammation. In some instances however, it is possible that they may have interpreted these according to preconceived views of their nature. I say this, because the significance of certain appearances presented by the cervix in different cases has not as yet been clearly determined. In regard to the diagnostic characters of inflammation, there is confessedly much difference of opinion, and there is still more as to those of ulceration. But in determining the nature of any physical changes which may be met with in an organ, it is necessary to take into consideration the general and local symptoms with which they are attended, in order to arrive at correct conclusions, for the mere anatomical characters of inflammation may be present without inflammation actually existing. Now, on this point, the cases under consideration possess no kind of uniformity. I have met with some in which inflammation and ulceration had been diagnosed after ocular examination, in which there was neither local pain, uneasiness, or functional disorder, or any febrile or constitutional derangement. In some instances, it is admitted that the general health has been perfectly good, where the cervix has presented the so-called appearances of inflammation; and they have been met with after death in persons who had died of other diseases, and who had never experienced any uterine pain, derangement, or uneasiness. Now such facts are calculated to shake our confidence in the inflammatory nature of *some* of these appearances of the cervix. I do not doubt the necessity or the importance of making an ocular examination of the uterine organs in cases of doubtful disease; but in estimating the character of the appearances which are observed, we should proceed with much caution, and with a due attention to the general and local symptoms which are met with in each case. In this country the subject of the physical characters of inflammation has been very carefully investigated by Dr. Yellowley, in an essay on the vascular appearances of the stomach, published in the *Medico-Chirurgical Transactions*, and he has shown that all the characters of true inflammation may be met with when no such disease could have existed. They were found in an intense degree in the mucous membrane of the stomach in healthy criminals who were executed in the prime of life, and in patients who had died of other diseases, quite unconnected with any affection of the stomach. He observes also very truly, "that in judging of the existence of external inflammation in the living body, it is not by mere redness or turgescence of vessels that the opinion is guided, but by those circumstances in conjunction principally with pain, heat, and

swelling. It does not therefore appear to be less necessary, he observes, for the purpose of enabling us to judge of the existence of internal inflammation, that *something unequivocal in the symptoms* should be superadded to the *appearances* submitted to our consideration, than that there should be assistance required in judging of external affections in addition to mere colour or vascularity." The conclusions which Dr. Yellowley has arrived at on this subject have generally been assented to by the pathologists of this country, who avail themselves of his investigations in deciding upon the inflammatory nature of the physical appearances which are met with in different organs. The uterus can be no exception to their truth; and bearing them in mind, we may venture to doubt whether the appearances which have been attributed to inflammation of the cervix may not in some cases have another origin, and be indicative of other pathological conditions.

Again, in accounting for the origin, and the supposed frequency of these inflammatory lesions, we are referred by some writers to the anatomical and physiological characters of the uterine organs, to the vascularity of the cervix, the presence of cellular tissue in it, and the peculiar functions which these organs are destined to fulfil. But surely in such views there must be some fallacy. It is scarcely consistent with the usual providence of nature, to suppose that such susceptibility to disease should be the necessary consequence of the due performance of the ordinary functions of an organ; and when a writer gravely tells us that the function of parturition cannot take place without inevitably, in many, if not in all cases, being accompanied by erosion, laceration, and contusion of the lining membrane of the cervix, we are tempted to inquire if this can really be so; and whether this can truly be said of the organ—the contemplation of which of old inspired Galen with such wonder and admiration, and which Swammerdam, many centuries afterwards, described as the *miraculum naturæ*. I do not think that all can participate in such views; there must be many who believe that the uterine organs have been constructed so as to be adequate to the proper performance of their allotted functions, and who are disposed to look elsewhere, than to their anatomical and physiological characters, for an explanation of the source of their morbid actions.

But, on the other hand, it is a well-established fact, that local diseases may arise exclusively from derangement of the general health—from morbid conditions of the blood—irritative disorder of organs which have extensive sympathies and abnormal states of the nervous and ganglionic centres. This principle was strongly inculcated by Abernethy, is in harmony with the doctrines of Hunter, and has been practically recognized by a host of English practitioners. A due appreciation of it has, moreover, led to very valuable results in practice. It has taught us to look beyond the mere appearance of things; to trace morbid actions up to their remote origin or source; and thus to arrive at more rational and successful modes of treatment. Upon this principle, we are often able to connect local diseases with causes with which at first they would appear to have but little connexion, and the application of this doctrine is daily becoming more extended, as our knowledge of the nervous system and of physiology generally is ad-

vanced. "I must confess," says Sir Benjamin Brodie, "that, in proportion as I have acquired a more extended experience in my profession, I have found more and more reason to believe that local diseases, in the strict sense of the term, are comparatively rare. Local causes may operate so as to render one organ more liable to disease than another; but everything tends to prove, that in the great majority of cases there is a morbid condition, either of the circulating fluid or of the nervous system, antecedent to the manifestation of disease in any particular structure. Moreover, even in those cases in which a disease may be distinctly traced to some kind of mechanical injury, the character which it assumes depends as much on the state of the general health as on the injury itself."[1] By substituting for the general terms here employed, those which are significant of the particular diseases under consideration, we have in this passage those opinions clearly expressed, which it is the principal object of this paper to elucidate.

In considering how far this purpose could be best attained, and the relations of uterine to constitutional disorder most correctly determined, it has occurred to me to take a given number of uterine cases, to tabulate their principal antecedents and concomitants, and to observe their order, connection, and sequence. The subjoined table has been framed upon this plan; but I am aware that in constructing it I have not attained that degree of accuracy in its details which could be wished, and which is so necessary in inquiries of this kind. In questioning patients as to their state of health antecedently to any particular malady, it is extremely difficult to obtain from them satisfactory information. On casual inquiry, they will often say that they had been perfectly well, when, on further questioning, they will admit that they had been far otherwise. In soliciting information from patients respecting their maladies, I am also aware that the inquirer is apt to put questions which are calculated to elicit partial information, and such as may be favourable to certain preconceived views. This error I have also endeavoured to guard against in taking the histories of the cases from which this table is constructed, and I have sought to obtain the real facts connected with them, without being influenced by any particular bias. Indeed, when I commenced these inquiries, I had none whatever; and any opinions I may now entertain on the subject of uterine diseases, have entirely resulted from a consideration of facts which have come under my observation. Some of these I have endeavoured to analyse and embody in the subjoined table, in the hope that they may serve to throw some additional light upon the pathology and early history of uterine disorders. I have selected a hundred cases, because that number appeared to me to be sufficient to form a basis for comparison. I could have extended the number, but it did not appear to me that my object would have been materially advanced by doing so.

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[1] BRODIE, Sir B., Diseases of the Joints, p. 25. *Fifth Edition.*

[*Table*

No.	Name.	Age.	Uterine Disorder.	Antecedents.	Concomitants.
1	E. S.	69	Carcinoma, metrorrhagia	Long continued mental anxiety, dyspeptic symptoms, nervous derangemt.	Gastro-hepatic and intestinal disorder, asthenia
2	I. O.	21	Dysmenorrhœa, leucorrhœa	General ill health, nervous depression & weakness, dyspeptic symptoms	Dyspepsia, with marked hepatic and intestinal derangement
3	C. G.	40	Carcinoma, metrorrhagia	Severe trouble, mental uneasiness, marked dyspepsia, nervous prostratn.	Anæmia in a marked form, with gastro-intestinal disorder
4	H. P.	45	Hysteralgia	Mental anxiety and trouble, dyspepsia, and gastrodynia	Well-marked dyspeptic symptoms, and spinal irritation
5	S. S.	39	Metrorrhagia abortus	Great ment. uneasiness, agitation, dyspeptic symp.	Anæmia and derangement of digestive organs
6	S. C.	25	Leucorrhœa, dysmenorrhœa	Over fatigue, disturbed sleep, nervous prostration, dyspepsia	Anæmia, spinal irritation, hysteria, dyspeptic symptoms
7	M. L.	17	Leucorrhœa	Weakness, nerv. prost., and dyspeptic symptoms	Anæmia, gastro-hepatic derangement
8	E. S.	25	Profuse leucorrhœa, dysmenorrhœa	Much mental uneasiness, languor, and general weakness, dyspept. sympt.	Anæmia and general derangement of the digestive system
9	S. G.	38	Hysteralgia, leucorrhœa, dysmenorrhœa	Mental uneasiness, dyspeptic sympts., gen. weakness, ill health, rheumat.	Anæmia, gastro-intestinal derangement, nervous headaches
10	A. W.	34	Leucorrhœa	Bad health generally, dyspepsia	Nervous debility and dyspepsia
11	M. S.	49	Metrorrhagia, carcinoma	Severe & long continued mental anxiety, dyspepsia	Anæmia, severe dyspepsia, spinal irritation
12	M. M.	36	Leucorrhœa	General weakness and ill health, dyspepsia	Anæmia, dyspept. symptoms, severe gastrodynia
13	M. C.	26	Leucorrhœa, menorrhagia	Derangement of the digestive organs.	Derangement of the digestive organs
14	J. W.	21	Leucorrhœa	Hæmorrhage post part., gastro-intestinal disorder	Anæmia, asthenia, gastro-intestinal disorder
15	C. W.	36	Leucorrhœa, menorrhagia	Long-continued dyspepsia.	General derangement of the digestive organs
16	E. S.	22	Hysteralgia, leucorrhœa	Dyspepsia, much intestinal derangement	Anæmia, spinal irritat., gastro-intestinal disorder
17	S. K.	25	Hysteralgia, irreg. menstruation, leucorrhœa	Weakness, nervous depression, and dyspepsia	Anæmia, disorder of the stomach and digestive organs
18	E. C.	23	Leucorrhœa, amenorrhœa	Over fatigue, physical exhaust., dyspeptic symp.	Anæmia, gen. debility, gastro-intestinal disorder
19	C. B.	33	Leucorrhœa, hysteralgia	Protracted suckling in the case of two children, dyspep. symps., weakness	Anæmia and severe dyspepsia
20	M.A.H	31	Leucorrhœa	Bleeding and salivation for pleurisy, hæmorrhage post partum, dyspepsia	Well-marked anæmia, gastro-intestinal disorder
21	M.A.P.	24	Leucorrhæa	Anxiety, trouble, dyspep.	Anæmia, dyspepsia
22	R. L.	22	Amenorrhœa	Residence in a damp and unhealthy situation, gen. debility and dyspepsia	Anæmia, feverishness, dyspeptic derangement, bronchocele
23	E. E.	21	Metrorrhagia hysteralgia	Labour two months ago, the digestive organs subsequently disordered	Anæmia, marked disorder of the stomach and digestive organs
24	M. W.	36	Irritable uterus	Difficult labour, attended and followed for some time by hæmorrhage, extreme weakness, dyspeps.	Anæmia in a severe form, great derangement of the stomach and digestive organs

No.	Name.	Age	Uterine Disorder.	Antecedents.	Concomitants.
25	M.A.H	31	Leucorrhœa	General ill health and weakness, dyspepsia	Anæmia, disorder of the stomach & digestive orgs.
26	M.A.B.	15	Amenorrhœa	General weakness and nervous prostration	Well-marked anæmia, disord. stom. & digest. org.
27	E. M.	30	Leucorrhœa, hysteralgia	Several labours attended with much loss of blood, gen. weakness, prostration	Anæmia, dyspepsia, piles, and hæmatemesis
28	M.A.M	23	Leucorrhœa	Weakness, nervous symptoms, dyspepsia	Anæmia, considerable disorder of the stomach, and digestive organs
29	C. P.	30	Uterine hæmorrhage at the 7th month of preg.	Anxiety and uneasiness of mind, dyspeptic symptoms	Sickness and great disorder of the stomach and digestive organs
30	M. R.	17	Amenorrhœa	Weakness and dyspepsia, much disorder of the stomach and bowels	Anæmia, great disorder of the stomach and digestive organs generally
31	A. S.	40	Irregular menstration and leucorrhœa	General ill health, prostration, disordered stomach and bowels	Anæmia, diarrhœa, much chylopoietic derangement
32	E. J.	44	Hysteralgia, leucorrhœa	A very severe illness, weakness, nervous symptoms, dyspepsia	Anæmia, asthenia, and dyspepsia
33	E. J.	51	Leucorrhœa	Much trouble & anxiety, bad living, tongue long disordered	Weakness, dyspepsia, nervousness
34	E. K.	44	Metrorrhagia	Severe attack of cholera, subsequently pregnancy, attended with much weakness and gastro-intestinal disorder	Extreme anæmia, marked disorder of the stomach and digestive organs, nervous symptoms
35	S. Y.	50	Leucorrhœa	Much anxiety of mind, dyspepsia	Bad gen. health, disordered stomach, nervous symptoms, rheumatism
36	E. W.	25	Hysteralgia, leucorrhœa	Weakness, languor and nervousness, bad health, much disorder of stomach and bowels	Anæmia, great disorder of the stomach and digestive organs
37	S. M.	30	Hysteralgia, leucorrhœa	Mental anxiety, over fatigue, languor, weakness, and depression	Anæmia, disorder of stomach and digestive organs, spinal irritation
38	M. M.	21	Scanty menstruation, leucorrhœa	Bad general health, nervous symptoms, weakness, bad morning tongue	Anæmia, disorder of stomach and digestive organs
39	S. S.	20	Leucorrhœa	Weakness, nervous symptoms, dyspepsia	Anæmia, disord. stom., and digestive organs
40	E. M.	27	Hysteralgia, leucorrhœa	Dyspepsia	Anæmia, disord. stom., and digestive organs
41	M. T.	25	Leucorrhœa	Rheumatic complaints	Anæmia, rheumatism
42	J. S.	35	Hæmorrhage post partum	Mental excitement, rheumatism	Anæmia, and rheumatism
43	A. D.	40	Suppres. mens., hysteralgia, leucorrhœa	Acute disorder of stomach and digestive orgs. prior to menstruation	Great derangement of the stomach and digestive organs
44	M. S.	37	Hysteralgia, leucorrhœa	Weakness, nervous symptoms, and dyspepsia	Anæmia, disorder of stomach & digest. organs
45	J. J.	38	Suppres. mensium	Irregular menstruation, four very difficult labours, each attended with considerable flooding, mental anxiety, and indigestion	Anæmia, much disorder of the stomach and digestive organs

No.	Name.	Age	Uterine Disorder.	Antecedents.	Concomitants.
46	A. B.	18	Suppressio mensium	Irregular menstruation, general weakness and prostration, dyspepsia	Anæmia, much disorder of the stomach and digestive organs
47	M.A.N	18	Amenorrhœa, leucorrhœa, hysteralgia	Always had indifferent health, had small-pox at 12, has never been well since; weakness, and a bad tongue on awaking	Anæmia, great disorder of the stomach and digestive organs
48	M. C.	53	Leucorrhœa	Dyspeptic symptoms, rheumatic attacks, weakness, and gen. ill health	Anæmia, disorder of digestive organs, rheumatism
49	M. B.	21	Menorrhagia	Disorder of the stomach & digest. organs brought on by sea-sickness	Very great disorder of the stomach and digestive organs generally
50	J. V.	38	Metrorrhagia, fibrous enlarge. of uterus reaching to umbilicus	Considerable mental anxiety, constitutional weakness, occasioned by cholera, dyspeptic symps.	Marked anæmia, disorder of stomach and digestive organs
51	S. W.	34	Hysteralgia, dysmenorrhœa, leucorrhœa	Protracted suckling, weakness, dyspepsia	Anæmia, disorder of stomach and digestive organs
52	M. A.	32	Hysteralgia, menorrhagia, leucorrhœa	Bad general health, weakness, dyspepsia	Anæmia, disorder of the digestive organs generally, spinal irritation
53	M-A-W	23	Hysteralgia, suppres. mens., leucorrhœa	Protracted suckling, general weakness and prostration, dyspeptic symptoms	Anæmia, much disorder of the digestive organs generally
54	E. L.	25	Hysteralgia, dysmenorrhœa, leucorrhœa	Much mental anxiety, bad general health, weakness, and dyspepsia	Anæmia, disordered stomach and digestive organs, spinal irritation
55	A. H.	38	Irreg. menstruation, profuse leucorrhœa	Anxiety and trouble	Anæmia, general weakness and prostration, disorder of digestive organs
56	J. T.	38	Irregular menstruation, profuse leucorrhœa	Mental uneasiness, long residence in a tropical climate, general prostration, and dyspepsia	Marked anæmia, and great disorder of the digestive organs
57	P.W.	35	Hysteralgia	Mental uneasiness, much disorder of the stomach and bowels	Asthenia, depression, great disord. of stomach & digest. orgns., spinal irrit.
58	C.W.	31	Hysteralgia, dysmenorrhœa, leucorrhœa	Mental anxiety and trouble, five very difficult labours, preceded by much disorder of digest. organs	Anæmia, spinal irritation, great disorder of the digestive organs
59	E. S.	23	Irregular menstruation, leucorrhœa	Never had good health, menstruated at 18, previously to which, and subsequently, the digestive organs have been disordered; 16 months ago was much frightened, uterine ailments have been much aggravated since	Anæmia, dyspeptic symptoms, intestinal disorder, spinal irritation
60	S. M.	20	Hysteralgia, irreg. menstru., leucorrhœa	Anxiety and mental excitement, dyspeptic symptoms	Anæmia, disordered stomach and digestive organs, spinal irritation
61	S. H.	32	Metrorrhagia, miscarriage	Anxiety, dyspeptic symptoms, weakness, and nervous depression	Anæmia, disorder of the digestive organs

No.	Name.	Age	Uterine Disorder.	Antecedents.	Concomitants.
62	M.A.H	30	Dysmenorrhœa, leucorrhœa	Bad general health, depression, dyspepsia	Anæmia, disor. of digest. orgs., gen. weakness and depress., spinal irritation
63	R. G.	24	Metrorrhagia	Two months after labour, attended and preceded by much mental anxiety, dyspepsia	Anæmia, disorder of the digestive organs
64	L. F.	36	Hysteralgia, dysmenorrhœa, leucorrhœa	General health very bad, anxiety & trouble, dyspepsia, weakness, depression	Anæmia, disorder of digestive organs, spinal irritation
65	M.A.B.	17	Amenorrhœa	Bad health, anxiety, great fatigue, dyspepsia, weakness, and depression	Great disorder of digestive system, intense anæmia, nervous symptoms, and spinal irritation
66	E. M	21	Hysteralgia, leucorrhœa	Weak, low, and generally out of health	Anæmia, disorder of digest. organs, & spinal irrit.
67	A. B.	36	Irregular and painful menstruation	Bad general health, anxiety & trouble, weakness and depression	Anæmia, great derangement of the digestive organs, and prostration
68	S. W.	27	Profuse leucorrhœa and dysmenorrhœa	Very bad health, dyspepsia	Anæmia, dyspepsia, dysuria
69	E. P.	28	Menorrhagia, leucorrhœa	Great weakness & very bad health, anxiety of mind and dyspepsia	Anæmiated, disorder of digestive organs, spinal irritation
70	M. N.	43	Hysteralgia, dysmenorrhœa	Very bad health, much ment. anxiety, dyspepsia, very difficult labour	Anæmia, disorder of digestive organs, spinal irritation
71	E. E.	27	Hysteralgia, irreg. menstrua., leucorrhœa	Weakness and depression	Anæmia, disorder of digestive organs
72	S. W.	45	Hysteralgia, leucorrhœa	Great anxiety, very bad health, and severe labour	Anæmia, disorder of digest. organs, spinal irrit.
73	S. N.	26	Hysteralgia, irreg. menstrua., dysmenorrhœa	Bad health, dyspepsia	Anæmia and disorder of the digestive organs
74	S. W.	33	Hysteralgia, profuse leucorrhœa, dysmenorrhæa	Great mental anxiety, hæmorrhages after labours, general prostration	Anæmia, disorder of digestive organs, spinal irritation, hysteria
75	E. N.	28	Hysteralgia, dysmenorrhœa	Much anxiety, bad health, dyspepsia	Anæmia, disorder of digest. organs, spinal irritat.
76	A. A.	23	Amenorrhœa	Weakness, gen. deprsn. disorder of digest. organs	Anæmia, marked disorder of digestive organs
77	J. C.	29	Profuse leucorrhœa, dysmenor.	Excessive fatigue, depression, and dyspepsia	Anæmia, disorder of digestive organs
78	E. H.	26	Hysteralgia, irreg. menstrua., profuse leucor.	Bad general health	Anæmia, asthenia, disorder of digestive organs
79	M.A.H	37	Hysteralgia, fibrous enlargement of cervix	Mental anxiety, weakness, and depression	Anæmia, dyspepsia, spinal irritation
80	C. G.	27	Irreg. & painful menstruation, leucorrhœa	Very bad health, weakness, and gastric disorder	Anæmia, derangement of digestive organs very marked
81	S. H.		Scanty & painful menstrua., profuse leucorrhœa	Scrofulous disease, general prostration	Anæmia, gastrodynia, and dyspepsia
82	E. H.	17	Amenorrhœa	Weak, nervous, and generally out of health	Anæmia, disorder of digestive organs

No.	Name.	Age	Uterine Disorder.	Antecedents.	Concomitants.
83	E. A.	31	Irregular menstruation, hysteralgia, leucorrhœa	Over fatigue, mental agitation, dyspepsia	Derangement of the digestive organs
84	L. C.	43	Hysteralgia, dysmenorrhœa	Mental anxiety, hysteria, dyspepsia, weakness	Anæmia, hysteria, dyspepsia, spinal irritation
85	S. D.	27	Leucorrhœa	Bad health, weakness, and dyspepsia	Anæmia, disorder of the digestive organs
86	M.A.H	26	Scanty & painful menstruation	Bad health	Anæmia, marked dyspepsia
87	S. S.	35	Irreg. & painful menstruation, leucorrhœa	Bad health, weakness, and nervous symptoms	Anæmia, disorder of digestive organs, nervous symptoms
88	M. G.	37	Hysteralgia, dysmenorrhœa, leucorrhœa	Weakness, depression, and gastric disorder	Anæmia, and derangement of digestive organs
89	M.A.B	34	Hysteralgia, leucorrhœa	Severe labour, preceded by bad health and gastric disorder	Asthenia, general disorder of digestive organs
90	M.A.B	34	Profuse and persistent menorrhagia, recurring frequently for years, fibrous enlargement of the neck and body of the uterus	Long continued derangement of the stomach and digestive organs; severe flooding after labour	Anæmia, considerable disorder of the stomach and digestive organs, nervous symptoms
91	J. K.	18	Irregular, scanty, and painful menstruation	Bad health, and derangement of digestive organs	Anæmia, nervous symptoms, and great disorder of digestive organs.
92	E. W.	25	Dysmenorrhœa, profuse leucorrhœa	Bad health, depression, dyspepsia	Anæmia, nervous symptoms, and disorder of digestive organs
93	A. E.	23	Dysmenorrhœa,	Bad health, dyspepsia	Anæmia, dyspept. symptoms, spinal irritation
94	M.S.R.	40	Metrorrhagia, fibrous enlargm. of neck and body of the uterus	Mental anxiety, weakness and depression, long continued disorder of digestive organs	Anæmia, great derangement of the stomach and digestive organs
95	E. J.	30	Irregular and often excessive menstruation, leucorrhœa	Much mental uneasiness, impaired general health, dyspeptic symptoms	Anæmia, depression, disorder of digestive organs
96	J. J.	24	Dysmenorrhœa, leucorrhœa	Weakness and bad health, dyspepsia	Anæmia, dyspepsia
97	J. I.	26	Hysteralgia, dysmenorrhœa, leucorrhœa	Bad health and debility, depression, dyspepsia, & nervous symptoms	Anæmia, dyspepsia, and nervous symptoms
98	M. O.	26	Irregular and very scanty menstruation	Mental uneasiness, occasioned by leaving home, weakness and nervous symptoms, dyspepsia	Intense anæmia, marked disorder of the stomach and digestive organs
99	M.F.S.	19	Metrorrhagia, leucorrhœa	Weakness, nervous symptoms, dyspepsia	Anæmia, very marked derangemt. of digest. org.
100	M.E.B	27	Menorrhagia and severe leucorrhœa	Previous miscarriage, long continued derangement of digestive organs	Anæmia, and very severe derangement of digestive organs

On analysing this table, it will be found to comprehend thirty-seven cases in which the uterus was morbidly irritable; fifty-two cases of disordered menstruation; sixty-five of leucorrhœa; and seven of organic disease. These affections were variously blended in different cases; and, upon the whole, it may be said to be rare for any uterine disorder to be met with in a perfectly isolated form. Irritable affections, for instance, are generally associated with either menstrual or leucorrhœal disorders. Menstrual disorders seldom occur without leucorrhœal discharges, or some other kind of uterine derangement; whilst leucorrhœa is so frequent a concomitant of all morbid conditions of the uterine organs, whether functional or organic, that it can scarcely be regarded in the light of an idiopathic disease. With regard again to antecedents, the table points to the fact, that in nearly all the cases some derangement of the general health preceded the uterine disorder. The occurrence of languor, weakness, and depression, would show that there had been antecedent disturbance of the nervous system. The digestive organs must have been disordered in the majority of these cases, whilst the symptoms referable to the nervous and muscular systems would tend to show that there was probably some abnormal condition of the circulating fluid. In looking to the concomitant affections, again we observe that a disordered condition of the chylopoietic organs is very frequently, if not invariably, met with; that anæmia presents itself concurrently with uterine derangement in a large proportion of such cases, amounting to nine-tenths of those which are contained in the table. Spinal irritation was met with in thirty-six cases out of the hundred, and would appear to have important relations to uterine disease. The general inference, then, deducible from these facts, is, that uterine disorder is for the most part preceded by constitutional derangement, and that this is more especially referable to the nervous system, the digestive organs, and the blood; and that various morbid conditions in respect of these present themselves, either as complications or concomitants of most uterine affections.

But let it be understood, that however uterine disorder has arisen, it may continue long after the exciting causes shall have passed away; may assume the character and importance of an idiopathic affection; and, as such, be the cause of various secondary disorders. A healthy female, for instance, receives a severe fright during menstruation, which is immediately followed by suppression, and this may continue for some time, even for months: here the disturbing cause was evidently mental, momentary, and transient,—not so the effect; and this, so long as it continues, may be a source of embarrassment to the constitution, and the immediate cause of secondary disease of other organs, which again, by reacting upon the uterus, would tend to perpetuate or maintain a state of irritation which is unfavourable to the return of healthy functional action. But in other cases, uterine derangement originates in causes of a more permanent nature, as in the instance of disorder of the chylopoietic organs; which, whilst on the one hand a prolific cause of it, is on the other, often a persistent malady,—often continuing for years, and that, too, in despite of every available mode of treatment. Now, should the uterine organs fall into a state of irritation or disorder, as a consequence of this, it must follow that such irritation or disorder will be equally protracted and difficult of cure:—nay more,

vascular disease will sooner or later supervene upon such irritative disorder, and thus increase the difficulties of the case, independently of its being aggravated and perpetuated by the continuance of its original cause. These circumstances show the necessity of regarding uterine diseases in a comprehensive manner; but they do not militate against the correctness of the views which I have ventured to express, and which I shall now proceed to illustrate.

The Origin of Uterine Disease from Disturbed States of the Nervous System must be generally admitted, and every practitioner must be cognisant of cases in which it has arisen from such causes. Severe mental emotion, shock, or affliction, will, it is well known, give rise to painful uterine affections, to interrupted, excessive, or irregular menstruation, miscarriage, or premature labour; and if such consequences follow such causes, it is reasonable to conclude that causes of a similar but less violent nature will equally give rise to slighter but no less certain deviations from normal uterine action. This, indeed, is in reality the case, and many instances of uterine disease may be traced to the continued influence of grief, anxiety, and other uneasy states of mind. But the nervous system may be disturbed in many other ways, by various pursuits, by residence in an unhealthy situation, by insufficiency of food, over fatigue, and other physical causes, which tend to depress the constitution and lower the tone of the nervous system. And here also the uterine organs may suffer; for in whatever way nervous influence is withheld, whether from defective or irregular supply, such parts being inadequately supplied with nervous energy, will either take on irregular actions, or become morbidly susceptible to disturbing influences.

The recent researches of Dr. Robert Lee, in regard to the nerves and ganglia of the uterus, are of extreme interest in a practical point of view, as tending not only to show how great is the amount of nervous energy possessed by that organ, but as serving to explain the cause of that intimate sympathy which exists between it and other organs of the body, a circumstance upon which so much of its physiological as well as pathological conditions depend. It would not be inconsistent with the views of modern physiologists to attribute to those ganglia and nerves important bearings upon the subject of uterine pathology, regarding them as we must as nervous centres, which, under the influence of certain stimuli, give rise to corresponding actions, either conducive to health or disease, according to the character of the impressions which are received. In speaking of the nervous ganglia generally, a recent writer observes, "that they are nervous centres, which probably receive through afferent fibres impressions of which we are unconscious, and reflect these impressional stimuli upon afferent motor fibres; that perhaps motorial stimuli emanate from them; the movements excited by, or through the ganglia, being always involuntary, and affecting chiefly the muscular parts of the viscera, the sanguiferous, and perhaps absorbent vessels, and that in fine, the chief purpose served by the ganglia and ganglionic nerve fibres, is to govern the involuntary, and, for the most part, imperceptible movements of nutrition, so far at least as these movements are not dependent upon the brain and spinal cord."[1]

[1] Quain's Anatomy; Edited by Dr. Sharpey and Mr. Quain, p. ccxxiii.

Consistently with these views, then, it may be assumed, that so long as the uterine ganglia receive, through afferent fibres, impressions of a normal character, so long will normal ganglionic actions ensue, giving rise to healthy uterine action, both in regard to function and structure; whilst on the other hand, impressions of an abnormal character will excite ganglionic actions equally subversive of both. The *modus operandi*, then, of disturbed states of the nervous system, irritative conditions of the nervous centres, and disorders of remote organs, in the causation of uterine disease, is either by the uterine ganglia participating in such states of disorder, or receiving impressions which tend to morbid actions. Regarded, then, in this point of view, we cannot be surprised that the majority of causes which tend to uterine disturbance should have a constitutional rather than a local origin; for whatever impressions are made upon the body, whether through the mind or otherwise, which are capable of being reflected upon the uterine ganglia, and are calculated to excite morbid actions, are so many ways in which uterine disorder or disease may be induced. Examples of this occur in all uneasy states of mind, in irritative disorder of organs with which the uterus has sympathetic relations, and in abnormal conditions of the blood; and if it is the case that uterine disturbance most frequently arises from such causes, it cannot be expected that it should cease, so long as the conditions upon which it depends continue.

In connexion with the nervous system, there is no subject of greater interest or importance than the influence of the mind, or rather of certain uneasy or emotional states of mind, in giving rise to uterine derangements; and there is none which it is more necessary to study and appreciate fully in all its bearings. In regard to pregnant women, the effect of sudden or severe emotion has been often of a very serious nature; such as the death of the *fœtus in utero*, many alarming sensations, and abortion, miscarriage, or premature labour, according to the period of pregnancy. Should the child's life be spared, it has been born deformed, idiotic, maimed, or disfigured, whilst parturition itself has been seriously compromised. These circumstances are, however, well known to the profession, and need not be illustrated by any particular instances. But the effect of severe mental emotion upon the non-pregnant female is often equally serious, although less frequently observed; and there is scarcely a functional disorder of the uterus which may not, and has not been, occasioned by it. Thus Baudelocque reports that sixty-two women were attacked with uterine hæmorrhage, or suppressions, upon the occasion of the explosion of the powder magazine of Grenelle. M. Husson gives the case of a woman who, at several different times, was attacked with menstrual suppressions under the influence of claps of thunder. M. Colombat observed, in July 1830, that the reports arising from the platoon firing and cannon shot produced the same effect in several women. He also states, that a relation, whose menstruation was ordinarily very regular and abundant, was attacked with a sudden suppression, in consequence of a frightful dream, a kind of nightmare. With regard to menorrhagia, again, it is well known, that all circumstances capable of imparting a sudden shock to the ennervation, such as joy, grief, anger, fright, have been its causes: and M. Alibert relates the case of a female who,

whenever she gave way to transports of passion, was attacked with violent hæmorrhage from the uterus (see Meigs *on the Diseases of Females*). I have myself reported cases in which hysteralgia arose from sudden fright.

But the influence of less violent perturbations of mind, of anxiety, grief, affliction, etc., although productive of less marked results, are equally the cause of many uterine maladies; and although such states of mind in themselves do not admit of a direct cure by medicine, it is yet possible to do much by studying the nature, order, and sequence of the morbid actions to which they give rise. In some cases of this kind, the uterine organs would appear to receive a direct impression from the brain of a disturbing character, and uterine derangement to follow, without the intervention of any other organ or agency; and this is especially the case in the instance of sudden shock or emotion. But in other instances, and more particularly where the mental affection has been of a less violent nature, it would seem that other organs were disturbed, either concurrently with the uterus, or altogether independently; and the consequences differ accordingly. In the first of these cases, it will generally happen, that the uterine disorder, and that concurrently produced, will reciprocally react upon one another; and this reciprocal reaction, while it gives increased intensity and persistency to each, will at the same time disturb the constitution in a proportionate degree. In the second case, where the mental uneasiness, etc., is principally or entirely reflected upon some organ, it will often happen that the disorder thus produced will become the immediate cause of uterine derangement, either by a sympathetic or reflected operation; and in this respect it has appeared to me, from many facts which have come under my observation, that the spinal cord, or rather its ganglia, have important relations to uterine pathology. Spinal irritation is, as I believe, a frequent consequence of mental uneasiness, shock, or emotion, and at the same time, when so produced, a frequent cause of uterine disturbance; and it is to spinal irritation thus induced and productive of uterine disorder that I would more particularly wish to draw attention, as exemplifying in one form the relations which exist between uterine and constitutional disorder.

The existence of spinal irritation as a distinct and idiopathic affection, whether dependent upon mental or other causes, has been altogether denied by some writers, while it has been doubted by others. In speaking of it, Dr. Abercrombie remarks, that "it may be doubted whether it conveys any definite notion, or whether it is not to be considered as a gratuitous principle assumed so as to answer to the phenomena, rather than deduced from observation". But, with all the deference and respect due to so high an authority, it must be added, that the truth of the doctrine has been affirmed by many eminent practitioners, and so many facts have been accumulated in support of it, that it is impossible to doubt its reality, however difficult it may be of explanation. I shall, in the first place, state the grounds upon which I consider it entitled to be ranked as a distinct affection, and then those which point to its connexion with mental causes on the one hand, and uterine derangement on the other.

The subject of spinal irritation was first noticed by Mr. Pleyer, of

Malmesbury, in the twelfth volume of the *Quarterly Journal of Science;* and his attention would appear to have been first directed to it, from observing that the symptoms of spinal disease frequently resemble various and dissimilar maladies, and that commonly the function of every organ is impaired whose nerves originate near the seat of disorder. The occurrence of pain in distant parts particularly attracted his attention, and induced frequent examinations of the spinal cord, and the results of his investigations is given in the following words: "After some years' attention, I consider myself enabled to state, that in a great number of diseases, morbid symptoms may be discovered about the origins of the nerves which proceed to the affected parts, or of those spinal branches which unite with them; and that if the spine be examined, more or less pain will commonly be felt by the patient on the application of pressure about or between those vertebræ from which such nerves emerge. If disease is confined to one side of the body, or one arm, or one leg, this tenderness will be felt on the *same side* of the spine *only;* but if central parts, or *both sides* of the body, or both arms or legs, are diseased, tenderness will be felt on *both sides* of the spine. This symptom has been found to attend various other affections. This spinal affection may, perhaps, be considered as the *consequence* of diseases, but of its existence at their *commencement* any person may satisfy himself; and this circumstance, combined with the success which has attended the employment of topical applications to the tender parts about the vertebræ, appear to indicate that the *cause may* exist there."

The correctness of these observations has been attested by many subsequent writers, and more particularly by Dr. Brown, Dr. Darwall, Mr. Teale, and the Messrs. Griffin, the latter of whom have given us the result of their investigations upon the subject in a work on the functional affections of the spinal cord and ganglionic system of nerves, which contains the most complete and elaborate account of the phenomena resulting from spinal irritation that has yet been published. More recently the matter has been treated of by Dr. Todd, in an article in the *Cyclopædia of Practical Medicine*, and he has endeavoured to show that anatomy affords some support to the doctrine. He particularly insists that it is unfair to deny the previous existence of compression, or irritation of the spinal cord, or of the spinal nerves at their origins, because the anatomist cannot detect any vestige of disease after death; he points out that the spinal cord and the nerves which emerge from it, are surrounded by a venous anastomosis of remarkable complexity, that these veins do not possess valves, that they communicate freely with the superficial veins and with the numerous muscular veins in the region of the back; and from these anatomical considerations he infers, that such a degree of congestion or turgescence of this spinal venous plexus may easily occur as will excite irritation at the origins of the spinal nerves, and that such congestion may exist *ante mortem* without leaving any trace of it *post mortem*. These facts certainly meet many of the objections which present themselves to the reception of spinal irritation as a distinct pathological affection. For, if spinal congestion is so ready a consequence of irritation of the cord, the phenomena it presents, and its mode of causation, do not essentially differ from the usual consequences of irritative

disorder of other organs. The doctrine of venous congestion, as explanatory of the phenomena of spinal irritation, accords well with many pathological facts which have been observed in connexion with it. Thus it is most frequently met with in persons who are weak and anæmiated, in those whose general health has been impaired, and thus in those in whom the circulation must be languid and favourable to the occurrence of venous congestion. It is at the same time most successfully treated by measures which improve the health, the tone of the nervous system, and the vigour of the circulation.

But, notwithstanding these circumstances, there are many who deny the existence of spinal irritation as a distinct pathological affection, and regard it, when present, rather as an accident or a casualty than as an independent lesion; and it must be admitted that it is difficult to establish the affirmative of this question; first, because the exact nature of spinal irritation has not, as yet, been satisfactorily determined; and secondly, because *post-mortem* examinations have not hitherto thrown any light upon it. But these objections do not appear to me to be by any means fatal to the doctrine; for there are many diseases, and more especially of the nervous system, the reality of which cannot be doubted, the nature of which is yet obscure, and in regard to which *post-mortem* investigations have elucidated nothing. Let us look, for instance, to tetanus, hydrophobia, and some forms of epilepsy. This spinal affection, moreover, is admitted to be functional, to be one which does not lead to fatal consequences, and therefore one the nature of which cannot be determined by *post-mortem* inquiries. But admitting these difficulties, it may be replied, that the history of these cases, their symptoms, and more particularly the effect of remedies, point conclusively to the reality of spinal irritation as a distinct pathological condition. A female, perhaps in delicate health, receives a sudden fright or shock, which is followed, either immediately or remotely, by uterine symptoms. The spinal column is examined, and tenderness found in the lumbar or sacral region: possibly no other organic lesion is discoverable: and in this case the application of a sinapism or of some other counter-irritant to the tender portion of the spine is followed by a cessation of the uterine symptoms, without any other kind of treatment. Here it must be obvious, that some state of the spinal cord existed, upon which the uterine malady depended, unless, indeed, such an occurrence were rare and accidental. But that it is not so, is proved by the frequency with which such cases are met with; and of which I subjoin the following as examples.

Case. Mary Ann Davies, aged 20, a healthy young woman, rather more than eight months advanced in pregnancy, received a sudden fright, on the 18th September; labour pains came on shortly afterwards, and, at half-past two the next morning, she was safely delivered of a living child. She went on very well after her labour for the first twenty-four hours, but afterwards became feverish, her digestive organs disordered, and she was seized with severe pain in the uterus, which had continued for many hours persistently before I saw her. On examining the spine, there was well-marked tenderness in the lumbar and sacral region. A sinapism was directed to be applied to this part, and the uterine pain disappeared shortly afterwards. The only medicine given was an alterative dose of blue pill.

Case. Ann Keane, aged 20, had nearly reached her full period of pregnancy, when she was frightened: no particular symptoms occurred for some days, but on the eighth day uterine hæmorrhage took place; this was not found on examination to be connected with placental presentation, nor had the labour apparently commenced. After continuing for six hours rather profusely, it ceased; and twenty-four hours afterwards labour came on, and she was in about eight hours safely delivered of a healthy child without any particular loss of blood. Some hours after this, she complained of much uterine uneasiness, and on examining the spine, it was found very tender in the sacral region. The uterine pain disappeared on applying a sinapism, and there appeared to be no other cause for it or the hæmorrhage than the irritable state of the spine.

Case. Harriet Benjou, aged 19, applied at the Paddington Free Dispensary, suffering from amenorrhœa and leucorrhœa; the former was brought on by a fright, and since the suppression she had suffered from headache and nervous symptoms, with much derangement of the stomach and digestive organs. On examining the spine, there was decided tenderness in the lumbar and sacral regions; tartar emetic ointment was directed to be rubbed over the tender part, and, after four or five applications, a good deal of cutaneous irritation was produced, which was immediately followed by cessation of the leucorrhœa.

Mr. Teale, in his treatise on neuralgic diseases, gives several cases of an analogous though more general character, of which the following may be quoted.

Case. Mr. L., aged 26, complained of a feeling of indisposition, having suffered for a few days from stiffness in the neck and pain at the back of the head, extending laterally to the ears and upwards over the back part of the scalp; he perspired much at night; felt languid and unable to attend to business; about four weeks before, he was exposed to wet and cold, and had ever since been affected with these symptoms. On pressing the spine, there was tenderness over the first cervical vertebra, but no pain was produced by firm pressure upon any other part of the spine. Leeches were applied to the neck; and it was stated that the pains in the scalp were immediately relieved on their application.

Case. In another case, a lady, a week after her confinement, complained of pain in the head, occurring in the afternoons in a violent degree. It was described as a dull aching pain, principally seated in the occipital region, but extending from that part over the parietal bones; towards the temples, and in the neighbourhood of each ear, there was a small space more acutely painful than the rest. There were also pains darting over the scalp and along the upper part of the neck. She complained of violent pulsating sensations in the head, accompanied with distressing sounds, which she compared to the beating of hammers. Leeches had been applied to the temples, but without benefit; the spine was examined, and it was found extremely tender over the two upper cervical vertebræ. Leeches were applied to this spot, and it is reported that they gave immediate relief, and that no further return of the paroxysms was experienced.

Such cases as these are sufficiently simple, and for the most part require only that proper measures should be directed to the spine to

effect a cure. But it more frequently happens that spinal irritation is met with in conjunction with disorder of some other organ, which equally tends to keep up uterine derangement, and thus equally requires to be looked for and corrected. In this respect, derangement of the digestive system is a very frequent concomitant, and would appear to have a similarity of origin in many instances. In this case, if the concomitant affection is not duly attended to, any measures directed to the spine will fail of their anticipated benefit. The following cases illustrate this connexion and the results of treatment.

Case. Elizabeth Brown, aged 31, when about four months advanced in pregnancy, received a severe fright, which occasioned her almost to faint away. From the date of this occurrence, she began to feel many uneasy feelings in the stomach and womb, such as she had never had before in any of her six previous pregnancies. At times her sensation was that of extreme distension of the abdomen, as if it would burst; at other times she felt severe uterine pains, with occasional forcing sensations extending to the hips, back, and thighs. The digestive organs were much disordered, the tongue was unpleasant on awaking of a morning, the appetite was uncertain, and the bowels were sometimes costive, and at other times relaxed. On examining the spine, there was well-marked tenderness over the sacral region; indeed, pressure here brought on pain in the uterus. She was directed to apply sinapisms daily to the region of the sacrum, and mild alteratives with aperients were prescribed. In little more than a week her uneasy feelings had all subsided, and there was every probability of her going on favourably with her pregnancy.

Case. Margaret Nadauld was attended, October 1, 1850, suffering intense pain in the uterus and left iliac region. The pain was of a very excruciating character, was increased by the least pressure over the uterus externally, and the slightest touch of the cervix was attended with great suffering. There was a great deal of febrile disturbance, a quick pulse, hot skin, furred tongue, thirst, and disordered bowels. The lower part of the spine was extremely tender, and on pinching up the skin of the left iliac region, the patient evinced much suffering. The history of the case showed that it had originated in a fright, which the patient had had a few days before. She was directed to have a linseed-meal poultice applied over the hypogastrium, and a sinapism to the lower part of the spine. One grain of calomel, and five of Dover's powder, were to be taken every four hours, until three doses had been taken, and on the following morning as much castor oil as would insure a full action of the bowels. The next day, the symptoms were all abated; and, so far as the immediate attack was concerned, the patient considered herself to be convalescent.

Case. Emma Portsmouth, aged 28, unmarried, applied at the Paddington Free Dispensary under the following circumstances. She had been suffering from profuse and almost constant menorrhagia for a period of eight months, during which period, she had been scarcely a week free from some kind of sanguineous discharge from the uterus, and had very often passed clots of blood. At times she had severe uterine pain, and a sensation of bearing down with leucorrhœa, and much pain in the back. These symptoms had been preceded by general weakness and ill health, and much disorder of the stomach and digestive organs. She had also undergone a great deal of anxiety and trouble, to

which she attributed her bad health and uterine maladies. When admitted, she was suffering from the consequences of anæmia in a severe form, very marked dyspeptic symptoms, and the lower part of the spine was exquisitely tender; there was almost constant metrorrhagia and leucorrhœa when this was absent. In the first instance, the treatment adopted was the exhibition of the acidulated muriated tincture of iron, with drachm doses of the solution of the bichloride of mercury; but as in a week she was not materially better, and as the tenderness of the spine was very marked, she was directed to rub the lower part of it freely with the tartar emetic ointment night and morning, until pustulation took place. In a week from this period she is reported to be much better, and I find the following entry: "Is much better, looking better, hæmorrhage less, tongue cleaner, appetite improved, leucorrhœa less, feels stronger." Three days afterwards the following entry was made: "Is much better; no hæmorrhage, leucorrhœa less, no uterine pain, reports that she has very much improved since pustulation has taken place over the spine." This patient entirely recovered under this mode of treatment, but it is unnecessary to give the particulars of the case any further.

Case. Mary Johnstone was attended in November, 1850, suffering from much uterine pain, profuse leucorrhœa, and irregular menstruation. She had been out of health before any uterine symptoms had appeared. She had undergone much anxiety and trouble, the tongue was habitually dry and unpleasant, and she felt low, nervous, and depressed. She had been married two years, but had no children; there was extreme tenderness of the spine in the lumbar region, she was anæmiated, and her digestive organs were much disordered. The tartar emetic ointment was directed to be rubbed over the lower part of the spine night and morning, until pustulation took place, and she was ordered the acidulated muriated tincture of iron, with drachm doses of the solution of the bichloride of mercury three times a day. After pursuing this treatment for four weeks, she is reported to be perfectly well; to have no uterine pain or leucorrhœa, the tongue perfectly clean, and the digestive organs healthy. She especially mentioned, that the uterine pain and leucorrhœa ceased upon pustulation taking place over the tender part of the spine.

These cases appear to me to be sufficient to establish the truth of the doctrine for which I am contending; viz., that spinal irritation exists as an independent affection, and, as such, may be the cause of various secondary uterine disorders. In the first group of cases, we see it connected with symptoms which entirely disappear without any specific treatment, simply by attending to the morbid condition of the spinal cord. In the second, we find it coexisting with chylopoietic disorders, and together with these the cause of various uterine maladies, which again disappear without special treatment, on correcting the spinal affection concurrently with the derangement of the chylopoietic viscera. But it may be supposed that I have attached too much importance to the spinal affection in this latter group, and too little to the gastrointestinal as a cause of uterine disorder; and with the view of meeting this remark, I subjoin two cases, in which every treatment that appeared to be indicated was adopted, and failed, until the spinal affection had been recognised and remedied.

Case. Mrs. R. B., a lady of extremely nervous temperament, was

attended by me in her second confinement on Dec. 12, 1841. The labour was comparatively easy, and over in a few hours: no unfavourable circumstance occurred either during or subsequently to it, and, up to the 18th December, her progress was as satisfactory as could be wished. She began then to suffer from nervous symptoms, her sleep was broken, her tongue and digestive organs were disturbed, and slight febrile symptoms showed themselves. She had also pain and uneasiness in the uterine and left iliac regions; not at first persistent, but rather recurring at intervals: pressure over these parts gave increased pain. Dr. Ferguson, who was consulted on account of these symptoms, attributed them to a mild attack of puerperal fever, observing that he considered that there was congestion of the left ovarian ligament. Eight leeches were applied to this part, and subsequently warm linseed poultices. At the same time, small doses of grey powder and Dover's powder were given at intervals of four or six hours. The local pain and uneasiness were relieved by these measures, and, upon the whole, the case appeared to be going on favourably: but after some days had elapsed, there was still a greater degree of irritability of the constitution observed than is usual, the pulse continued quick, and the digestive organs were still somewhat disordered. Part of these symptoms were attributed to her extremely nervous temperament, and we had every expectation of their subsiding; but instead of this, a week after the treatment had been commenced, we were surprised by a sudden return of all the uterine symptoms, in a severe form; with them the pulse rose, and there was much constitutional disturbance. The abdominal pain was very acute, and aggravated by the least pressure. The sudden return of these symptoms suggested a doubt as to their inflammatory nature, and this was strengthened by the result of my inquiries. It appeared that some weeks before her labour, she had lost a near relative, whose death affected her very painfully; from that time she became subject to uneasy feelings in the left side of the abdomen, and the return of the uterine symptoms appeared to have been immediately caused by her seeing the monthly nurse fall while carrying her infant. The spinal column was examined, and there was extreme tenderness at the commencement of the lumbar vertebræ, and this was so intense that she completely started under the pressure of the finger. These circumstances were reported to Dr. Ferguson, who approved of topical counter-irritation over the tender part of the spine. Nothing but a sinapism was employed, but it succeeded in removing all her symptoms. The uterine pain subsided, as did also the constitutional disturbance, and she rapidly got well. She has since been twice confined, and on each occasion has done well.

Case. Elizabeth Loughborough, aged 25, applied August 6th, 1850, suffering from anæmia and dyspeptic symptoms, together with leucorrhœa; she had acute pain at the epigastrium; the tongue was dry and furred, and her appetite was bad; she had also pain at the back of the head, and felt giddy and faint; she menstruated regularly, but with pain, and she suffered much from leucorrhœa. Her illness had been preceded by mental agitation, and to this she attributed it. For these symptoms she was, in the first place, treated with alterative doses of blue pill, at bed-time; with the citrate of iron, and sesquicarbonate of ammonia, during the day. At the end of a fortnight, she

was not materially better, and still complained of severe pain at the epigastrium. The chlorate and nitrate of potass were now added to her mixture, and they were directed to be taken in effervescence with the citrate of iron. At the end of another week, she was still complaining of the epigastric pain; her digestive organs continued in a very irritable state, and upon the whole she was very little better. An examination was now made of the spine, and exactly corresponding horizontally with the pain at the epigastrium, it was found to be very tender upon pressure. The tartar emetic ointment was ordered to be rubbed over this portion of it, night and morning, until pustulation took place; no change was made in her medicines, and four days subsequently she reported herself to be very much better. The pain at the epigastrium was nearly gone, she felt generally stronger, and the leucorrhœa has almost ceased. From this time she rapidly improved, and was soon convalescent.

It appears to me impossible to reconcile the facts of these cases in any other way than by admitting the doctrine of spinal irritation as a distinct and independent affection; and although post-mortem investigations are wanting to inform us of the precise nature of the affection, the existence of some morbid condition of the cord or its ganglia, in such cases, is conclusively shown by the results of treatment. Nor is this doctrine by any means irreconcilable with well-established physiological facts: it is now, I believe, generally admitted, that the spinal cord is to be regarded rather as a series of nervous centres than a single organ; that from these centres emanate the nervous actions of corresponding parts of the body; and that one or more of these ganglia may be disturbed irrespectively of others. Now in this latter case it will follow, that the disorder of any given portion of the medulla will be principally evinced by disorder in those organs or parts which are supplied with nerves from the particular parts or ganglia which are affected; for as a general rule, it is found that disease of the nervous centres is less indicated by morbid phenomena in the immediate seat of the disease than in those organs or parts to which the nerves arising from them are distributed. This is certainly so in regard to structural diseases of the spinal cord and brain; and in cases where the trunks of nerves have been compressed or disorganised, the effects are less shown at the immediate seat of these lesions, than in those parts to which these filaments are distributed. In the more severe forms of disease, this principle, as observed by Mr. Teale, is readily admitted and recognised; and when, for instance, one half of the body shall have lost its sensibility, and the corresponding muscles their power of action, we look at once to the brain as the immediate seat of the disease. But in the slighter forms of disease of the brain and spinal cord, such as do not obliterate, but merely impair or pervert the functions of the nerves, this important principle, which is as strictly applicable here as in the former case, is too often entirely overlooked; and a numerous class of complaints are regarded as local affections, instead of being considered as actual diseases of that portion of the brain or spinal cord from which the nerves of the part are derived. I might support the correctness of these views by adducing numerous cases which would show how efficacious had been the effect of remedies directed to the spine, where treatment perseveringly ad-

dressed to the seat of pain or uneasiness had been altogether useless. But this would carry me beyond the scope and limits of this paper.

In the next place, I have to consider how far spinal irritation is a consequence of mental uneasiness on the one hand, and the cause of uterine disorder on the other. On looking to the foregoing table, I find that thirty-six cases are referred to in it, in which uterine disease had been preceded by, and was apparently connected with mental causes; and of these it was found that spinal irritation existed in seventeen, in a decided manner; whilst in five only was it met with independently of such causes. It should be added, however, that it may have existed in a larger proportion than this. But as the majority of patients were not so ill as to be confined to bed, the examination of the spine was generally made over their dress, and the result was consequently less accurate than could have been desired. To elucidate the point further, I have made the following analysis of twenty-six cases of spinal irritation, which occurred in connection with uterine disorder, giving their probable causes, and the nature of the concomitant affection.

Spinal Irritation.

Case.	Antecedents.	Concomitant Uterine Malady.
1	Bad health, dyspepsia.	Dysmenorrhœa.
2	Anxiety, hysteria, dyspepsia, and weakness.	Hysteralgia, dysmenorrhœa.
3	Anxiety, asthenia.	Hysteralgia, fibrous tumours.
4	Anxiety, hæmorrhage post partum, great debility.	Hysteralgia, dysmenorrhœa, profuse leucorrhœa.
5	Anxiety, dyspepsia, bad health.	Hysteralgia, dysmenorrhœa.
6	Anxiety, bad health.	Hysteralgia, leucorrhœa.
7	Fright, general weakness.	Acute hysteralgia.
8	Mental emotion, delicate health, pregnancy.	Uterine and ovarian disease, simulating puerperal fever.
9	Mental uneasiness, dyspepsia, bad health.	Hysteralgia, dysmenorrhœa.
10	Anxiety, dyspepsia, bad health.	Menorrhagia, leucorrhœa.
11	Anxiety, bad health, extreme weakness.	Amenorrhœa.
12	Weakness, depression, and general ill health.	Hysteralgia, leucorrhœa.
13	Anxiety and trouble, bad health, weakness, depression, dyspepsia.	Hysteralgia, dysmenorrhœa, leucorrhœa.
14	Mental uneasiness, dyspepsia.	Hysteralgia.
15	Anxiety, dyspep., 5 difficult labours.	Hysteralgia, dysmenorr., leucorr.
16	Anxiety, bad health, dyspepsia.	Hysteralgia, menorrhagia, leucorr.
17	Bad health, weakness, dyspepsia.	Hysteralgia, menorrhagia, leucorr.
18	Weakness, depression, anxiety, and over fatigue.	Hysteralgia, leucorrhœa.
19	Dyspepsia, intestinal derangement.	Hysteralgia, leucorrhœa.
20	Bad general health, weakness.	Dysmenorrhœa, leucorrhœa.
21	Great mental anxiety, dyspepsia.	Carcinoma, metrorrhagia.
22	Mental anxiety, dyspepsia.	Hysteralgia.
23	Fright.	Hysteralgia, leucorr., dysmenorr.
24	Over fatigue, want of sleep, extreme debility, nervous symptoms.	Amenorrhœa.
25	General bad health, dyspepsia, fright.	Hysteralgia, leucorrhœa, irregular menstruation.
26	Mental trouble, excitement, dyspep.	Leucorr., irregular menstruation.

From this table it would appear, that of the twenty-six cases, twenty had been preceded by mental uneasiness, shock, fright, or agitation of some kind. This is a large proportion, but not larger than, I believe, really obtains in the instance of well marked cases of spinal irritation; and the conviction that such causes lead to this affection is so strong on my mind, that I would suggest a careful examination of the spine in all cases where they have preceded uterine symptoms. That such states of mind should affect the medulla spinalis in the manner supposed, is rendered at least probable by what occurs in other cases. As the result of violent or sudden emotion, we know that the functions of the cord throughout may be disturbed; as is shown in the case of chorea, a disease especially of the spinal system, and of which the most frequent exciting cause is sudden fright. Some cases of epilepsy may also be referred to in support of this view; and if it is the fact that violent or sudden mental impressions should give rise to general disturbance of the spinal cord, it appears to me reasonable to conclude that less vivid impressions, such as various uneasy states of mind, should also affect it and give rise to irritation of a more subdued but more persistent character. The influence of such mental causes in tending to the production of functional disorders of the spinal cord, is further rendered probable by other considerations. Thus this affection is for the most part met with in weak, anæmiated, and delicate persons. Dr. Taylor, of Huddersfield, who has paid great attention to it, informs me, that it is his opinion that spinal irritation may arise from any cause which reduces the general strength, and that nothing more than this is necessary for its production. Regarded then in this point of view, mental uneasiness or anxiety would be quite adequate to account for it, by its depressing influence upon the constitution and the general health. Again, it has been conjectured by some who have investigated the subject, that the phenomena immediately depend upon congestion of the spinal venous plexus; a circumstance which would also be favoured by the causes in question, nothing being more calculated to depress the tone of the nervous system, or the vigour of the circulation, and thus to give rise to venous congestion, than continued anxiety or uneasiness of mind.

But, in the last place, the question occurs; If it be admitted that the causes in question can so affect the spinal cord as to give rise to functional disorder of it, can such disorder give rise to uterine derangement, as I have supposed and represented? To this question, I have no hesitation in giving an answer in the affirmative. The cases I have related point in their history to this conclusion, analogy is alike in favour of it, and it is impossible to reconcile the results of treatment with any other view. Nor do I think that any one who has carefully investigated the subject can arrive at any other conclusion. It is quite true, that we cannot always determine whether the uterine or the spinal affection has the priority, because we have not often the opportunity of investigating this point at a sufficiently early period of the case; but some who have had this opportunity, affirm that spinal irritation exists at least from the commencement of such cases. Thus Mr. Player remarks (*Quarterly Journal of Science*, vol. xii, p. 429):— "This spinal affection may perhaps be considered as the *consequence*

of diseases; but of its existence at their commencement any person may satisfy himself, and this circumstance, combined with the success which has attended the employment of topical applications to the tender parts about the vertebræ, appears to indicate that the *cause* of such diseases may exist there."

Very similar views have been expressed by other writers upon this subject. In treating of it in a paper published in the *Midland Medical and Surgical Reporter*, for May 1829, Dr. Darwall enumerates many of the symptoms with which spinal irritation is attended, and observes, that the most common disturbance met with in connexion with it is in the uterine functions,—that he had scarcely seen an instance of it in which this had not occurred. Most commonly, he says, there is menorrhagia; in some few cases the catamenia are diminished, or they are completely suppressed; but whether they are increased or diminished, leucorrhœa almost invariably attends, and is generally more or less profuse, in proportion to the duration of the general disorder. When the catamenia are profuse, they are usually in the earlier part of the period dark-coloured and grumous. At p. 88 of his interesting work on neuralgic diseases, Mr. Teale gives the particulars of a case, in which considerable uterine disturbance coexisted with much derangement of the general health, and more particularly of the chylopoietic organs, in which the spine was tender throughout, and where treatment directed to this condition proved eminently successful. Dr. Griffin informs us, that painful affections of the uterus dependant upon irritation of the lumbar portion of the cord, are of much more frequent occurrence than any previously mentioned; and he refers particularly to hysteralgic affections, to dysmenorrhœa, to menorrhagia, and amenorrhœa. Of dysmenorrhœa, he says, that patients subject to it are also very often the subjects of general irritation of the spine. Menorrhagia and amenorrhœa he describes as less doubtful results of this state, the former being exceedingly common. Mr. Burns, of Glasgow, has written a valuable paper on the subject of spinal irritation, and has especially drawn attention to the connexion which exists between sacral tenderness and painful conditions of the uterus and bladder; and Mr. Tate has published a small volume on the coincidents of spinal tenderness with hysteria generally, and has given several cases illustrative of the benefit which has resulted from counter-irritation over the spine by means of the tartar emetic ointment.

With regard to the particular forms of uterine derangement which are met with in connexion with this affection, I find, on referring to the twenty-six cases which I have tabulated, that—

Hysteralgic affections occurred in 18	Amenorrhœa in 2
Dysmenorrhœa in 9	Leucorrhœa in 13
Menorrhagia in 4	Menstruation was irregular in .. 2

But these affections were variously associated in different individuals: a fact which of itself would almost point to a constitutional origin. The predominance of hysteralgia is very striking, and has been noticed in general terms by other writers. It also favours an opinion which I formerly ventured to express upon more general data, that impressions made upon the uterine organs, from or through the cerebro-spinal system, rather give rise to painful and uneasy conditions, whilst those received from or through the medium of the ganglionic system

of nerves, rather give rise to functional disorders in regard to nutrition and secretion. It is, however, necessary to bear in mind, that the causes of uterine disease are, for the most part, of a complex nature; that the cerebro-spinal and the ganglionic system of nerves are often concurrently disturbed, and that they thus reciprocally react upon the uterine organs, so as to give rise to very mixed and complex forms of derangement.

But spinal irritation, although I believe it to have important relations to uterine pathology, must not be supposed to constitute the sole medium by which nervous derangement is conducive to uterine disease; nor is it a consequence solely of such mental conditions as have been referred to. It may arise from depression of the general health, impoverished states of the blood, and various local irritations reflected upon the medulla. And uterine disorder may arise altogether independently of spinal irritation or mental influences. Whatever indeed tends to depress, disturb, or to embarrass the actions of the nervous system, will either directly or remotely produce it. For it is an admitted axiom, that the healthy performance of every organic function is dependent in a great measure upon the integrity of this system, the due generation of nervous energy, and its proper distribution to the several organs of the body. But none are so liable to suffer from a defective or irregular distribution as the uterine;—there are none which sympathize more largely with the constitution or the nervous system in its several physiological and pathological conditions. It is upon the uterine organs that all the impressions made upon the female organism, whether physical or mental, are either directly or indirectly reflected; and none are influenced so powerfully by the various affections and passions of the mind. Can it then be doubted, that in the mental phenomena, or rather in painful and uneasy states of mind, whether emotional or intellectual, we have a powerful and frequently operative source of uterine derangement, which it is important to recognise and to appreciate?

Nor can it be denied, that there are circumstances of an extrinsic character, which bear closely upon the subject under consideration,—circumstances which are connected with the social condition of the female, which give force and intensity to the operation of causes which might otherwise be harmless. It cannot for instance be doubted, that in the restraints, the refinements, and the education to which the female constitution is subjected as society is constituted, there are to be found important elements tending to the causation of disease. No class or grade of society possesses an immunity from social evils, whatever may be its social advantages. The more developed is the mind, and the more refined are the feelings, the greater will be the susceptibility of both to the influence of disturbing causes, and these are to be met with to a prolific extent in the anxieties and cares, the troubles, the disappointments, and perturbations of mind to which each in his social capacity is subject, and from which no class is exempt. It is true that the troubles of one person are not exactly the troubles of another, nor do those of one grade of society correspond exactly with those of another; but upon the whole, the actual amount of good and evil, of suffering and enjoyment, is pretty equally distri-

buted; and accordingly we observe a great similarity in the diseases which prevail among different classes of the community, however opposite may have been the stations of different individuals, and however different may have been the causes, whether physical or moral, which may have co-operated to produce them.

But it may further be affirmed, that the treatment of uterine diseases cannot be successfully carried out if these circumstances are disregarded, or if the relations which subsist between the nervous and the uterine systems, in their physiological and pathological conditions, are overlooked. Mental affections are not, of course, susceptible of direct cure by medicine, but the physical disorders they give rise to frequently are, if properly investigated and treated; and in this investigation, it is necessary to study attentively the order and sequence of the morbid actions which ensue. In this order and sequence, the affection of the spinal cord, which I have been considering, claims our especial attention, not only as forming an intermediate link between psychical and uterine affections, but as constituting, in many cases, a distinct pathological condition, calculated in itself to react injuriously upon the uterine organs, and the removal of which is absolutely necessary for that of the uterine malady. The treatment, moreover, of this condition, is sufficiently simple and successful when properly recognised. It comprehends little more than regularly repeated friction over the spinal column; counter irritation, more or less active, over the tender portion, continued for longer or shorter periods, according to the persistency or acuteness of the spinal irritation; while in extreme cases, a few leeches may be usefully applied to the seat of irritation when this is very acute. These measures, together with moderate and regular daily exercise, attention to diet and regimen, and such general hygienic measures as are calculated to improve the general health, appear to me to comprehend all that is necessary for the cure of spinal irritation considered as an abstract affection. Some writers have recommended cupping and continued recumbency, but I have never met with a case in which the free abstraction of blood would have been justifiable; neither should I anticipate any benefit from continued recumbency. On the other hand, regular exercise has appeared to have been of the utmost service, and more especially when combined with change of air and scene, and such circumstances as operate agreeably on the mind.

The benefit which I have seen result in the treatment of uterine affections, connected with irritable states of the spine, from such simple measures as I have mentioned, leads me to regard the spinal affection as being in many cases an original lesion, and to differ from those who look upon it as being merely subordinate, or incidental to the uterine. And when writers speak of the derangements of the nervous system, of the various pains which are felt in the abdominal and pelvic viscera, of the sensations which are complained of in their neighbourhood, and point to remote disorders as the direct consequence of uterine irritation, and the symptoms by which uterine disease is denoted, I would venture to inquire whether they are not sometimes confounding with the uterine affection one which in its nature and origin is perfectly distinct? I am, I confess, led to adopt the affirmative of this question, when I find that the history of these cases points in nearly

all to an antecedent disturbance of the nervous system; and I am strengthened in this view, when I observe the symptoms of uterine disease in some cases to disappear without any specific treatment, by simply directing remedies to the spinal cord and the nervous system generally. On the other hand, I am not induced to relinquish this opinion on finding that such measures sometimes fail of their intended object, because I know that the causes of spinal irritation are at the same time those of various associated disorders of other organs, which, together with that of the spinal cord, originate and maintain a state of uterine irritation and disorder. But I am above all convinced of the truth of the position which I have assumed, when I meet with cases in which these affections have co-existed with uterine derangement, and have been supposed to be dependent upon it, and where, conformably with this view, it has been sought to remedy them by the constant, repeated, and persistent, but unsuccessful employment of measures specifically directed to the uterine organs, for periods varying from one to two years, and this, too, by practitioners of authority and eminence.

(To be continued.)

Chester Place, Hyde Park Gardens, October 1851.

THE FIRST OF OCTOBER 1851.

By AN OCTOGENARIAN.

The first of October is an interesting day to the medical profession: on it the different schools are opened, at which such acquirements and knowledge are to be obtained as will qualify the pupil to pass his examination at Apothecaries' Hall, at the College of Surgeons, or at the College of Physicians; and the public journals have announced more than twenty well-provided lecture-rooms, at colleges, hospitals, halls, and private institutions, where the necessary instruction may be acquired.

Anterior to the year 1815, few medical schools existed, and those were very incomplete, with the exception of those founded for anatomical and surgical teaching; but even upon these the attendance was not compulsory, and many persons practised as physicians, surgeons, and apothecaries, who had never attended a single course of lectures, or witnessed one dissection. In the year 1814, at the seven London Hospitals, namely, St. Bartholomew's, St. Thomas's, St. George's, Guy's, the London, Middlesex, and Westminster, there were only thirty-eight physician's pupils; in less than twenty years after the Apothecaries' Act passed, they increased to three hundred and twenty-six, and are now still more numerous.

The first important incentive to a more careful and appropriate medical education was effected by the privilege, granted by Parliament to the Society of Apothecaries in London, of electing a Court of Examiners, to inquire into the competency to practise medicine of all future apothecaries throughout England and Wales. This bill passed

through Parliament in the year 1815, but so little did the upper ranks of society estimate the value of a sound medical education, that after being, with great difficulty, got through the House of Commons, it at last passed the Lords by the paltry majority of ONE.

Some years afterwards, when, as one of the consequences of this Act, it became necessary to render the study and practice of anatomy more easy and unobjectionable, and when a bill was brought into Parliament to effect this desirable object, the measure was strongly opposed, and more than one honourable member urged as a most cogent reason against it,—that though a knowledge of practical anatomy was indeed required by surgeons who had operations to perform, yet, for physicians and apothecaries, a sufficient knowledge of anatomy might be gained from plates, from wax and terra-cotta models, from skeletons, and such preparations and dried specimens as were always to be found in museums and repositories.

Even in our own days, woefully deficient is the encouragement bestowed upon the medical man; and if there were not some redeeming exceptions, some cheering moments of comfort, his course would indeed be gloomy and overpowering; for he must often feel that his worth and his usefulness are unacknowledged, his fatigues and his anxieties unheeded, and his unselfishness and disregard of lucre derided and abused. The man—the individual—indeed, is often greatly beloved and respected; but the profession—the great body of practitioners — holds not that honoured rank in public estimation which it so justly merits. While labouring and toiling in the divine employment of striving to diminish the woes of his afflicted fellow-creatures, it cannot fail to mortify the honourable pride of an honourable practitioner to witness how much the palpable absurdities and deceptions of homœopathy are patronized by noblemen and influential commoners; how wonderfully strange it is, that clergymen should combine with infidels and atheists in practising Mesmerism; and that government itself does not disdain to derive a large revenue from quackery,—quackery, the very essence of which is falsehood, and which can only be sustained by the publication of advertisements and books of the most obscene, prurient, and disgusting character that can be imagined.

And yet, surrounded as it is with difficulties and discomforts, the art and science of medicine has steadily pursued a course which has placed it in a very high state of elevation. Let us then take a retrospective view of what medical practice was a hundred years ago, and we shall not be ashamed of what it is now.

Dr. Hulse, a physician of great eminence and reputation in the reign of Queen Anne and her two successors, was in 1738 appointed physician-in-ordinary to King George II, and was created a baronet. He died April 10, 1759, aged 74. His practice was very large and lucrative, and Dr. Heberden bears testimony to his "judgment and sagacity". Dr. Heberden likewise mentions his partiality to the bark,[1]—the Peruvian bark,—which he had "prescribed for forty years, more than any other physician out of England, and as much as any one in it".

[1] Transactions of the Royal College of Physicians, vol. ii, p. 15.

Among the many distinguished patients of Sir Edward Hulse, one of the most celebrated was the Earl of Orford, more generally known as Sir Robert Walpole, who died March 18th, 1745, after a very painful illness, and who gave his own "solemn injunction" to be opened after death by Mr. Ranby, "in order that he, who could no longer survive to profit mankind, might be the means of conveying to them what good he could after his death."

Ranby's narrative is neither erudite nor attractive; yet his statement of facts contains materials which could hardly fail to excite inquiry and discussion, especially among those who were exercising, in its various departments, the practice of medicine; so that if the noble lord's solemn injunction did not immediately effect all the good that in his dying moments he perhaps expected, yet it was doubtless one of the quiet contributory streams which began the improvements in medical and surgical science, and which will continue to move on

"——— in omne volubilis ævum."

The narrative[1] states, that in the spring of the year 1744 Lord Orford had an attack of intermittent fever, for which, by the advice of Sir Edward Hulse, he took the bark with good effect, and retired for a short time to Richmond-park. Here, one day after dinner, he was suddenly "seized with great pain in the head, giddiness, violent sense of sickness, and frequent inclination to vomit"; in addition to which, he suffered "intense pain in the back, and passed coffee-coloured urine". It might be expected that such a series of symptoms would have been considered sufficient evidences of a distinct and alarming attack of disease, but it was hastily and inconsiderately attributed to "a return of the intermittent fever, attended with some nephritic symptoms", and the bark was again prescribed, "some regard being had to these nephritic symptoms".

It may well be supposed that the symptoms here mentioned did not yield to the bark; the "hard and full pulse" was therefore attacked by venesection, and "he was bled in the arm even to three times" before this alarming symptom gave way, and the coffee-coloured urine ceased to be discharged. His lordship's medical attendants appear to have contented themselves with *conjecturing*, for it was only conjecture, that some concreted matter in the kidneys had passed into the bladder, and it was expected that what had thus passed into the bladder would be speedily expelled through the urinary passages; "but as these expectations were entirely fruitless, a doubt began to prevail whether it were anything more than a gravelly affair, accompanied by some symptoms produced by intermitting fever"; and this inconclusive reasoning being allowed to have more weight than it merited, the use of the bark was returned to and persevered in, under different forms, for six months.

The quietude which this severe attack made necessary, and the abstaining from *much* wine,—"for he was so abstemious as to drink only a little sack",—kept Lord Orford's complaints within some bounds for a considerable space of time; but in attempting to make a visit in an "extremely easy chariot", he felt an unusual irritation to

[1] A Narrative of the Last Illness, etc. By JOHN RANBY, Principal Serjeant Surgeon to the King, and F.R.S.

make water, and the urine was tinged with blood; and this irritation and bloody urine continued to distress him, unless in a state of absolute rest. It may easily be imagined that a surgeon would, under such circumstances, suspect stone in the bladder, and Mr. Ranby expressed his opinion that this was the case. But physicians and surgeons did not conduct themselves towards each other in those days as they do now; and "as the blood that came away was judged absolutely by the physician to proceed from the kidneys, this symptom was deemed of no material consequence", and his lordship was allowed to return to Norfolk, no attempt having been made to ascertain what was the actual state of the bladder.

With, upon the whole, little difficulty, he reached Houghton in July, and remained there under the care of Dr. Hepburn till November: he kept himself very quiet and retired, took largely of marshmallow tea, and other demulcents, and avoided much exercise or exertion. Several times, however, when using gentle carriage exercise, he was much distressed with pain and irritation, and occasionally tinges of blood were observable in the urine: these symptoms were sometimes mitigated by taking manna in cream of tartar whey; indeed, Dr. Hepburn's treatment was soothing and judicious.

Lord Orford returned to town in November, but his journey was performed with great difficulty, occupying the space of four days. On the last day, in travelling twenty miles only, he suffered excessive torture; "he was obliged to alight from his chariot at least twenty times, and every time subjected to a discharge of almost pure blood, with excessive pain". Sir Edward being again called in, "and having heard all the particulars from his lordship's own mouth", gave it as his opinion, "that the seat of the whole disorder was in the kidneys, insomuch as the bladder being furnished with but few blood-vessels, could not supply any great quantity of blood; and besides, that almost all discharges of blood proceeded from the kidneys."

Ranby expresses his regret at differing in opinion from a physician of so great experience, but he "was sufficiently convinced that the stone in the bladder was the sole cause of all this tragedy". This opinion, however, was strangely slighted, especially as in a former illness, ten years ago, a small stone had passed through the urethra; and in Norfolk, while under Dr. Hepburn's care, much gravel and one or two small stones had in the same manner passed away.

Under these circumstances, "a soft and diluting method" was prescribed and persevered in for about three weeks, when Dr. Jurin,[1] the inventor of a lithontriptic medicine, was called in as consulting physician with Sir Edward Hulse. "*Searching*" was now proposed, but Dr. Jurin was so well convinced that there was a stone in the bladder, as to render the introduction of a sound unnecessary. At this consultation it was determined that a dram of the doctor's *lixivium lithontripticum*, made into a draught, or rather a potion (for it amounted to seven ounces), should be taken three times a day. The dose of the

[1] Dr. Jurin distinguished himself early in the last century as an advocate for the newly introduced inoculation of the small-pox. He was a very eminent physician, and became President of the College. The exact composition of his lithontriptic is not generally known, but the principal and most efficacious ingredient was the caustic potash.

lixivium was gradually increased, and between the 15th December and the 4th of February, "six and thirty ounces of this lixivium were taken", variously combined with stomachics, cordials, etc., as seemed necessary. The effect of this remedy appears to have been considerable in disuniting the calculous concretions, but at a grievous expense to the mucous membrane, and indeed, to the entire structure of the bladder. Frequent discharges of pieces of calculus, more or less cemented together, excessive pain, and profuse hæmorrhages, harassed the poor sufferer most cruelly. "On the 9th of January particularly he had a more than ordinary flux of blood, attended with greater pain than he had ever yet felt, at the end of the penis. . . . . In the evening he voided as much gritty matter as would cover a shilling, of the colour of common house sand, and looking as if wrought together with gum-water." "February 4.—About nine he discharged a great quantity of blood, and soon after complained of an intolerable pain in the penis. Mr. Ranby extracted from the urethra a stone exceeding the dimensions of the largest kidney bean. About one, he felt a strong irritation to make water, which was followed by a large discharge of blood, a good deal of it coagulated, in which were found eleven pieces of stones, some of them smooth and rounded on one side, and scraggy on the other; some sharp and pointed on all sides, as having been inner parts; but not one of these that did not evidently appear to have been a part of some larger stone. These fragments were whitish, but in the stones which were entire the parts of the joinings were streaked with yellow veins, resembling in some measure Mosaic pavement". These discharges of blood and portions of calculus continued through the day, but in the evening "an extraordinary coagulation of blood was discharged, but there could not be discovered any concreted substance, till the coagulum had been dissolved in a large basin of water, when about fifteen pieces presented themselves, one of which was a stone, near entire, and almost as big as the great one in the morning". This seems to have been the last evacuation of calculi; but the hæmorrhage continued profuse, and the patient was reduced to a most extreme state of lassitude and debility, in spite of the bark, which was again prescribed in various forms, but with, of course, little or no advantage. The fragments of calculus of all sizes exceeded forty in number.

Dr. Crowe was now called in, who appears to have agreed in opinion with Sir Edward, that the blood discharged was supplied by the kidneys, "it being in reality his sentiment, that all discharges of blood through the urethra flowed, not from the bladder, but entirely from the kidneys". Dr. Crowe did not recommend any particular mode of treatment. From this time, though the patient's progress was duly watched, and his pains occasionally relieved by opiates, nothing of importance is recorded, except some ineffectual attempts by Ranby and Cheselden to introduce the catheter. On the 18th of March, 1745, the friendly hand of death released the noble earl from the intense sufferings of a most afflicting disease.

It is a curious circumstance, that the announcement of Lord Orford's death, in the *Gentleman's Magazine*, stated that he had died of inflammation of the lungs.

The *post-mortem* examination, signed by "E. Hulse, J. Ranby, W. Cheselden", states that the bladder "had expanded itself above the

os pubis at least four inches: on cutting into the cavity, there issued a quantity of urine, with three large clots of coagulated blood, which no doubt had lain there some time. On separating the bladder from the parts with which it was connected, and dividing it from the neck to the bottom, several inflamed spots were observable, with an inflammation quite round the neck, about the breadth of two inches, and a lodgment in the membrane of several small stones about the size of half a grain of wheat. Its substance was of a very unequal texture, innumerable ridges as thick as the eighth of an inch, and many of them much larger, running across one another through the whole capacity of it, while the spaces between those ridges were as remarkably thin and transparent. The prostate glands were enlarged, and become harder than they commonly are. No defect was discoverable in the kidneys or ureters, though the pelvis was larger than usual." Nothing is said in the *post-mortem* examination about the state of the lungs.

A perusal of this case will not impress the reader with a favourable opinion of the practice of medicine in London anterior to the reign of "good old" King George III. Investigations into the nature, causes, and progress, or the probable results of diseases, seem to have been conducted with little nicety or exactness. The first symptoms of disease were not accurately analysed, and those which presented themselves during its progress were too often overlooked or neglected. Nor was there much discrimination in the choice of remedies; indeed, the virtues and value of the most important articles of the materia medica were neither well ascertained nor duly appreciated; but reliance was placed on old forms and combinations of remedies, which were prescribed rather to the name by which the disease was called, than to the symptoms by which its nature was to be learned and its management directed. The "judgment and sagacity" of Sir Edward Hulse enabled him to treat ordinary diseases with effect and advantage; but whosoever deals largely in any one course of treatment by the bark or any other remedy, shews little discrimination, or that amount of penetration which is required from an accomplished physician.

The so-called consultations of old were anything but deliberative and confidential: they were rather meetings of formality, at which the authority of one overruled the others; and the surgeons had rarely influence when they visited with physicians. When old Radcliffe was called in, he was the paramount: very few physicians could offer advice when he was present.

There were other physicians besides Dr. Jurin who possessed their particular *nostrums*; and when the nostrum was strongly recommended, and thought likely to cure any malady, it could not generally be separately purchased, but the inventor was called in to superintend and direct its use. Thus when Jurin and Hulse consulted about the employment of the lithontriptic, it had already been resolved that Lord Orford should take it; and though Sir Edward was of course told what the most important ingredients were, yet he probably was not acquainted with its actual composition. Dr. James used at first to be sent for, not because his skill was wanted, but because James's fever powders had been spoken of as the sure and only remedy. No doubt it became more lucrative when advertised and sold in packets, than when obtained by feeing the doctor. M.

BIBLIOGRAPHICAL RECORD.

THE SPINE: ITS CURVATURES AND OTHER DISEASES, THEIR SYMPTOMS, TREATMENT, AND CURE: to which are added some Remarks on Paralysis. By CHARLES VERRAL, ESQ., Surgeon to the Hospital for the Cure of Distortions, etc. etc. London: 1851.

THIS work, which is extended to 234 pages, might with much advantage to the professional reader have been compressed into one-third of that space.

We are indebted to the author for the description of a lighter, more elegant, and, we believe, more effective apparatus than has hitherto been introduced for the treatment of lateral curvature of the spine. The instrument, moreover, possesses one great advantage, viz ; that all its moveable parts are simultaneous, regulated by one simple screw. Different forms of the apparatus are represented by wood-cuts in various parts of the work, and, as far as the mechanical contrivances are concerned, we conceive that much credit is due to MR. VERRAL. We sincerely wish that we could have expressed ourselves equally satisfied with the more strictly medical portions of the work.

The second and third chapters are devoted to the subject of the LATERAL CURVATURE OF THE SPINE, in which the author advocates a plan of treatment consisting of alternate exercise and repose ; and points out that the recumbent position may have its advantages for such cases, as well as those means which are more directly calculated to remedy the debility in which the affection usually commences. The fact is clearly illustrated that in lateral curvature the vertebræ are not only inclined to one side, but are frequently rotated to a certain extent upon each other. The articulating surfaces by degrees become accustomed and adapted to the new position, and it is impossible to alter their directions, so long as the superincumbent weight of the head and shoulders tends to retain them in their abnormal situation. In the recumbent position, the articulating processes may be opposed by different corresponding surfaces, and by such portions of them as have not been altered in form by superincumbent pressure. For these reasons, we agree with Mr. Verral that the recumbent position, during certain periods of the day, may be of advantage in the treatment of lateral curvature of the spine.

We must, however, entirely dissent from the author when he says (p. 21), that marked benefit may be derived from putting the patient under such a course of medicine and regimen generally as should tend, in a slight degree, to produce temporary debility. "It must be pretty evident," he says, "that the more debilitated the system, and the more relaxed and flaccid the structures upon which our operations are to tell, the more readily will the deformity yield to the curative agency." We here approach the doctrine of the homœopathic school—want of power and its effects are to be cured by relaxation. If, indeed, the affair were one strictly of a mechanical nature, then, indeed, the softer and more pliable the parts, the more easily might we mould them to our will: but this is not so.

We are told (p. 8), that one of the causes of lateral curvature of the spine is, that "the ligaments become elongated, thin, and paler in colour"; and yet that it is advisable to commence the treatment of such cases "by inducing a certain amount of physical debility and consequent pliability of those structures upon which the mechanical contrivances are brought to bear"! (p. 21.)

The fourth chapter of the work is devoted to CARIES OF THE SPINE. Mr. Verral, in his preface, gives us a list of works that he has consulted to aid him in his investigations ; and we cannot help feeling, that in addition to those he has named, it would have been more satisfactory had he included

the work of Sir B. Brodie on the joints, especially in reference to the treatment of the caries of the spine. Sir B. Brodie informs us, in his later editions, that he has long given up tormenting his patients suffering from scrofulous affections with blisters, issues, and setons. Mr. Verral, on the other hand, maintains that in caries of the spine, great benefit will attend the guarded employment of counter-irritation, and that he is somewhat prepossessed in favour of issues in severe cases. (pp. 146-7.)

In the fifth chapter, PARALYSIS, proceeding from disease of the spine, is treated of. Here, we have still to remark the exclusively mechanical view which the author takes of the diseases of which he treats, and of their supposed "cures". The first step to be taken in the treatment of paralysis, is to change the patient from the supine to the prone position, which shall at once "occasion any fluid agent that is making pressure upon the cord to change its situation, from the simple circumstance of gravitation". (p. 172.) In the chapter on angular projection, Mr. Verral says that he is in the daily habit of witnessing the disease in every varying stage of its distressing career, and "if the malady be not arrested in its incipiency, it goes on to the formation of abscess, extreme debility, hectic, and probably death". (p. 119). But in the chapter on paralysis resulting from angular curvatures, he says, that by steady perseverance in the treatment recommended, "restoration is, humanly speaking, certain". (p. 173.)

The chapter on RICKETS, furnishes us with another remarkable instance of the tendency displayed throughout the work to explain everything by reference to mechanical laws. "One phenomenon in connexion with the disease is the excessive precocity of intellect which characterizes its victims, a circumstance that would seem to result from the premature development of the brain, *owing clearly to the softened condition of the cranial bones offering less resistance to the rapid increase of the cerebral masses.*" (p. 231.) Had not nature, therefore, made the mistake of prematurely closing up our skulls, we should be a much more intelligent race than we now are!

The last chapter treats of SPINAL IRRITATION, or hysterical affections of the spine. Mr. Verral supposes, that in some cases this affection would appear to originate from a low, chronic, inflammatory state, either of the membranes of the spinal cord, or the coverings of the nerves as they pass out from the medullary canal—neither of which conditions involve any actual alteration of structure in the parts affected. (p. 222.) No attempt however is made, either by cases or otherwise, to prove the correctness of this opinion; and we must confess ourselves at a loss to understand what is meant by chronic inflammation, which produces no change of structure. "The recumbent position—particularly, or, I should say, exclusively, the prone—is of eminent service, and should be employed in the early treatment of the disease, with but little intermission"! (p. 223.)

In the first case of this supposed affection cited, a delicate, nervous girl, 17 years of age, who had for the most part led a sedentary life, was placed upon a prone couch, and a succession of blisters were applied over the fancied seat of the disease, whilst the slightest attempt at motion was forbidden. "At the expiration of two months or ten weeks, she was permitted to take gentle exercise in her ward." This is not, it must be admitted, a very encouraging result. In a second case, in less than *three months* the patient had so far recovered (?) as to be allowed to walk out daily for an hour with the aid of an instrument. (p. 233.)

Such cases really do not deserve a serious consideration, nor should we have noticed this part of the work, were it not to distinguish it from that in which some mechanical defect or contrivance is described. For this, which we should have much liked to have seen published in a separate form, we give the author every credit; but we would suggest to him, that in treating the subject as a whole, the laws of life must be studied and described, as well as those of mechanics.

On Bubo and Perinæal Abscess. By John L. Milton, Esq., M.R.C.S., pp. 32. London: 1851.

The pamphlet before us is printed for private distribution. Its principal object is to advocate the use of tartar emetic in cases of bubo threatening suppuration. The result of this treatment in the author's hands is stated to be,—"that in almost every case in which it was properly carried out, resolution was effected if the case came early enough under treatment; and that even in those in which suppuration had proceeded to a considerable extent, an immediate arrest of all the prominent symptoms was obtained" (p. 12).

The same plan of treatment is advocated for abscess in the perinæum.

In both cases the inflammation is treated of as if it were an abstract essence, while the *cause* of the symptoms is not once touched upon. If the author had considered *what* it was which in either case gave rise to the inflammation, we venture to believe that he would no longer entertain the idea that the evil could be removed by simply diminishing the vascular action of the part.

In syphilitic bubo, there is a poison in the part to be got rid of; and in perinæal abscess, there is usually an escape of urine from its usual channel. The inflammation and suppuration in both cases are attempts, either to limit the effects of, or to eliminate, the offending matter, and simply to "hint back" (p. 28) the actions which nature sets up, is nothing more or less than to attempt to frustrate the intentions for which those actions were instituted.

The reception of the author's practice in the particulars now referred to, he has candidly stated in his preface.

"I am not aware that I have made a single convert to my views, except among my patients. By my professional friends my opinions have been utterly neglected, or met with objections."

Prevention and Cure of many Chronic Diseases by Movements. An Exposition of the Principles and Practice of these Movements for the Correction of the Tendencies to Disease, in Infancy, Childhood, and Youth; and for the Cure of many Morbid Affections of Adults. By M. Roth, M.D. pp. 302. London: 1851.

Dr. Roth's name appears in the *Medical Directory's* list of homœopaths; but like other speculators of the same class, he tries to have two strings to his bow. It appears that Kinesipathy, like the other *pathies*, may be united with homœopathy; though each, when occasion requires, must be lustily proclaimed to be a complete system of therapeutics. Mr. Everest preaches that, Christianity was of little use till Hahnemann appeared; the Bishop is silent, and the *Homœopathic Times* endorses the blasphemy. Why then may not Dr. Roth inform as many of the quack-fanciers as he can gather round his standard, that homœopathy itself, (notwithstanding all that Hahnemann and Mr. Everest have said to the contrary), is often in need of a help, and that that help is the new *pathy*—Kinesipathy—practised to admiration in London by the author?

Kinesipathy is a term derived from two Greek words, Κινέω, I move, and πάθος, a disease. It is the name of a medical system invented in Stockholm, by a fencing-master of the name of Ling, who gradually transformed his gymnastic academy into an hospital. Ling, like many who trade on the gullibility of mankind, was a man of great shrewdness; and he appears likewise to have been a poet of some fame in his native town.

Dr. Roth has served up the science of Lingism very nicely for the London public; and we have no doubt that he may, in virtue of the attractive woodcuts, the elegant getting up of his volume, and the outrageous absurdity of

its contents, divide some of the spoils of Belgravian folly, with fashionable Mesmeric maidens, homœopathic, and hydro-homœopathic doctors.

Gymnastic exercises are undoubtedly most important in the cure and prevention of many diseases; and so have they ever been regarded by the medical profession. We have no more objection to the use of movements—riding, dancing, fencing, swimming, etc.—in the treatment of disease, than we have to the use of water as a therapeutic agent. Exercise and cold water are and ever have been remedies much and deservedly esteemed by physicians; but Kinesipathy and Hydropathy are merely vile trading systems of charlatanry, built upon the foundation of the virtues of these means when judiciously used.

The work of Dr. Roth consists of an introduction, and of chapters on the history, on the theory, and on the practice of the system. Mingled with much nonsense, there is some sense, but wonderfully little, considering the inherent excellence of the subject—medical and hygienic gymnastics. The general scope of the work may be sufficiently gathered from the following extracts: a formal analysis of the book would be out of place in a journal devoted to medicine.

Treatment of Gonorrhœa. "The prescription in gonorrhœa is generally (besides some movements depending upon particular circumstances) the following:—

"1. Percussion on the sacrum, in the stride-standing position.

"2. Transversal chopping on the neck, in a sitting position.

"3. Pressure above the os pubis, in the lying position, with elevated back, while the separated and bent legs are drawn towards the abdomen.

"4. Vibration of the perinæum in the same position.

"The treatment begins with percussing the sacrum in the stride-standing position, which in the first day or two not only allays and relieves the more violent inflammation and copious secretion, but also changes the whole state of the disease in such a manner, that the following treatment by movements, (different according to the state of the patient), produces an increased flow of arterial blood in the upper extremities, and the cure is very much accelerated. In the first stage, during which only a moderate stitching pain, tension, and little secretion appear, the percussion on the sacrum is alone sufficient, if repeated three or four times daily. If the symptoms become more violent, and accompanied by chordee and pains during urinating, etc., then other movements are necessary; they make use of the transversal chopping of the neck, which acts strongly against the chordee, and of the pressure above the os pubis in the above mentioned lying position, which increases the venous absorption of the bladder and sexual organs, by its effect on the excited nerves of these parts.

"In the second period, if the urinating is very difficult, the perinæum swollen and painful, the discharge mixed with blood, and fever is present, then a more general treatment is necessary. To increase the more local absorption in the urethra, vibrations along the whole tract of the perinæum, from before backwards, are employed." (pp. 231, 332).

It may be necessary to give our readers the author's explanation of

Chopping, as described in one of his preceding chapters. It is as follows:—

"Chopping consists in alternative short blows produced by the external sides of both the operator's hands. Choppings are principally used on the posterior surface of the trunk, chest, and also on the limbs. If it is desirable that the succussion produced by this movement shall be less and softer, then the chopping is done with the external edges of the two little fingers, while the other fingers are spread apart, but not kept spasmodically fast, so that they act also by striking upon the little finger. Chopping may be confined to one part only, or may be exercised on a larger surface, by constantly moving the position of the hands. The chopping is called a *longitudinal* one, if the

hands are moved in the longitudinal direction of the trunk or of the limb, and a *transversal* one if the blows are executed across the limb." (p. 92.)

Suppressed Piles, it appears, are not amenable to the "harmonic medicine" of Hahnemann and Mr. Everest, *i. e.*, to real homœopathy, and therefore our author resorts to treatment which we doubt not the last named authority would consider quite as "frantic" as that of "the old school". This is the passage to which we refer:—"*Suppressed Piles, causing mental distress.* —After a sudden spontaneous or artificial stoppage of discharge of blood or slime, persons suffering from piles often become lunatics. These must be treated immediately, without any loss of time, by *movements acting very violently on the brain*, which must all be done in a horizontal position, and *the patient must be overturned, and as quickly as possible kept up and down by the assistants.* Many fear this overturning, because they wrongly believe that the blood acts only by its weight, and that it comes in too great a quantity to the brain. If the first were the case, the blood would never flow to the head in an upright position; with respect to the too great quantity, the blood is pressed on to the brain only, if the patient being nervous retains his breath, and actively resists while his trunk is moved up and down." (p. 227).

In all this the reader will observe that nux, lycopodium, and lachesis, etc., are never once mentioned by the homœopathic Dr. Roth. Well, truly, was it said at Brighton, that the dupes of homœopathy "have no conception of the vastness of its absurdity, and of the Protean wiles with which, setting honesty, consistency, and common sense at defiance, it bewitches the sick and the silly."

Report of the Speeches on Irregular Practice, delivered at the Nineteenth Anniversary Meeting of the Provincial Medical and Surgical Association, held at Brighton, August 13 and 14, 1851. pp. 32. London: 1851.

The various medical journals contain from time to time admirable exposures of the delusions and frauds practised by homœopaths and other irregular practitioners; but from the fact of professional periodicals not being suited for general perusal, we can hardly afford our patients, when they ask it, an opportunity of reading the opinions of medical men upon any prevailing or fashionable quackery. On the other hand, all the modern systems of charlatanry have journals in aid of their cause, which are obviously written solely for the public. Hygeism has its monthly *Hygeist;* homœopathy has its *Homœopathic Times*, and other prints; Mesmerism has its *Zoist*, et cetera; and Chronothermalism sends forth monthly *The Chronothermalist.* The extraordinary success of all the systems advocated in these periodicals is chiefly owing to their zealous, and often clever, advocacy by a stipendiary press, arrayed in the garb of pseudo-science. Quack medicines, in fact, are now being displaced by quack systems: and Professor Holloway will soon find that if he is to continue to work Lord Aldborough's leg successfully against Drs. Quin and Ransford's Mercurius, he must bring out, weekly, or monthly, *The Holloway Times.*

However much we may deplore the spread of quackery, we, as medical men, cannot do more, as regards the public, than point out our determination to keep aloof from it: and to this extent, as honest men, we are bound to go. The Brighton Speeches are particularly well suited to point out to the public, that the attitude of the Association, and we may add, of the whole profession, with regard to homœopathy, is not one of opposition, but one of defence; one which the Association was called on to assume, to preserve its respectability, and to entitle it to maintain its position as a society of honourable, truth-seeking, and scientific men. We, therefore, strongly recommend this pamphlet, as a publication admirably calculated to explain to intelligent laymen the real position which the profession has assumed towards homœopathic practitioners.

ORTHODOX MEDICINE: An Address delivered at the Annual Meeting of the Bath and Bristol Branch (June 26, 1851) of the Provincial Medical and Surgical Association. By JOHN ADDINGTON SYMONDS, M.D., President for the Year. Worcester: 1851.

This is a very admirable address. Many of the topics are similar to those discussed in the Brighton speeches, and in other recent pamphlets; yet there are important subjects touched upon, which are not adverted to in them, or, indeed, in any authoritative publication. Dr. Symonds uses the plain and explicit language of an honest man; and yet, (notwithstanding the badness of the persons whom he has to characterize), he avoids all coarseness of expression.

It is fortunate for the profession when physicians and surgeons of deservedly high reputation, acquit themselves of a duty by coming forward to denounce loose professional moralty, and charlatanic practices. With the public, such questions may appear to involve merely rival medical systems; but with us they involve the momentous alternatives of honour or infamy. Shall we for fees, or for anything else, hold professional intercourse with men who deride and malign us, and yet, when it suits thoir mercenary ends, represent themselves to the same public as belonging to our body? Shall we hold mock consultations with such persons, who, if they are honest in their professions, believe that medicine and surgery, as practised by us, are not only useless, but that they are in very truth the scourge and the curse on the community?

Passing over what is, perhaps, the best part of the address, we will extract one short passsage, as it touches upon a point which we do not recollect to have seen so plainly handled before; but which, from frequent experience, we suspect must be one of great moment to many practitioners. Often, very often, have we been sent for in cases of real or supposed danger, hurriedly, or during the night, by parties who in all slight ailments are in the habit of tampering with homœopathy. The quacks have received the greater part of the fees, and we have had all the responsibility and harassment; and sometimes we have been called when it was too late.

"I strongly advise my brethren," says Dr. Symonds, "to take an uncompromising part, not only by refusing to co-operate, even in the most indirect manner, with homœopathic practitioners, but also to show the public in what light we regard these marauders. I need not tell you that the only really remunerative cases to the general practitioner (except in the feeling of satisfaction in the discharge of an arduous duty, in the achievement of success in a difficult art, and in the thought of having saved a life, or assuaged pain and distress), are those in which his duty consists mainly in standing by the bedside of the patient, ready to interpose, if in his judgment any emergency arises; though they are cases to the cure of which nature alone is usually adequate. Nothing can really compensate him for the anxiety incident to the life-and-death encounters in grave cases, to say nothing of fatiguing days and broken nights. If, therefore, his attendance is sought by a family in such cases only, (and the instinct of the patient or his friends will generally lead them away from homœopathists on such occasions), he is justified in requiring that his reward should be very different from what it is when he has all kinds of cases submitted to him.

"I have no fear that this view of the case can be considered mercenary. Everywhere it is allowed, that from no profession is more gratuitous aid received by the public, and I am proud to believe that it is held to be one of the highest privileges of the profession that it has the power, and is allowed to render help to mankind as a labour of love. But as our patients often quote to us, 'The labourer is worthy of his hire,' so we may urge that the

hire should bear relation to the kind and degree of the labour. To employ a soldier on no service but fighting in pitched battles, bivouacking on malarious plains, or leading the 'forlorn hope' of a storming party, and then to tender him for such service the same pay as a soldier who is engaged all the year round in ordinary garrison duty, or in the light routine of the parade ground, in an exchange for the hardships and perils of a campaign, would surely be considered to be very unreasonable and very unjust, yet it is a case precisely parallel with that to which I have just adverted." (pp. 17-18.)

Manual of Human Physiology for Students: being a Condensation of the Subject, a Conservation of the Matter, and a Record of Facts and Principles up to the present day. To each subject are appended, in notes, Summaries in Rhyme of the Composition of the Fluids and Solids, etc. By John Morford Cottle, Licentiate of the Royal College of Physicians, London. pp. 303. London: 1851.

This book is professedly written for students to get up enough of physiology to pass their examinations; and the author modestly announces that he does not desire to contest the wider field, already so well occupied by Carpenter and Kirkes. With such students as will not try to master larger and profounder works, the present is likely to prove a favourite; and we must say that, excepting the poetry, it is of a grade very superior to the majority of those designed for the use of the lazy and the idle.

The author gives a summary of each chapter in doggerel rhyme, which summaries, we suppose, are to be committed to memory by those who have only time or inclination to get up their knowledge by rote, to serve them as rallying ground, when before a board of examiners. As a specimen of this style—a style long in vogue with grinders—we give Dr. Cottle's poem on the

"MOTIONS OF THE STOMACH.

"The normal motions of the stomach need
No motive power from th' vagus; and indeed
The gastric juice alike preserves its course,
As free as are the movements of the horse.
Like as the horse is ruled by spur and bridle,
The vagus urges on, or makes them idle." (p. 72.)

Lest Dr. Cottle should contemplate doing for anatomy what he has done for physiology, we beg to subjoin for his use a couplet much revered by grinders, and men when being ground:—

"The larynx is just under the skin;
But the pharynx is much farther in."

Manual of Physiology; including Physiological Anatomy. By Wm. B. Carpenter, M.D. *Second Edition.* With 190 illustrations. 12mo. pp. 616. London: 1851.

Dr. Carpenter has brought up his *Manual*, in this new and beautiful edition, to the present state of physiological science. Many alterations and additions have been made, as well as some omissions. This work is complete, without being too tedious for students: and to them we commend it as an admirable text-book. To those who may already possess one or both of Dr. Carpenter's larger treatises, the following passage from the preface is important:—"Although this Manual combines in some degree the scope of the author's *Principles of Physiology, General and Comparative*, and of his *Principles of Human Physiology*, yet it cannot be regarded as a mere abridgment of them, having been written, for the most part, with very little reference to them, and with every desire to make it complete in itself."

Translation of the Pharmacopæia of the Royal College of Physicians of London, 1851: with Notes and Illustrations. By Richard Phillips, F.R.S., L. and E., etc. (p. 567). London: 1851.

This well-known and standard work we are glad to find has not suffered in any degree by the melancholy event which has delayed its appearance. In a prefatory advertisement to this edition, Mr. J. Denham Smith gives the following explanation of the circumstances under which the duty of editor devolved upon him.[1]

"A portion of this work, on the completion of which the author had been laboriously engaged within a few days only of his decease, had been already consigned to the press, when his widow and executrix placed in my hands the copious manuscript and explanatory notes of my late highly valued friend and former teacher, in order that I might superintend its passage through the press. For the grateful task of editing this the author's last work, I possessed both the requisite leisure, and a long-standing acquaintance with his scientific views and methods of investigation; and most amply shall I be rewarded should I be deemed to have discharged this duty without detracting from the well-established reputation of the work."

In our opinion Mr. Smith has very ably and judiciously discharged his duty; and this, the last, is undoubtedly the best edition of Mr. Phillips' book.

The volume, like the *Pharmacopœia*, is divided into two parts: the first is devoted to the Materia Medica, and the second to the Pharmaceutical Preparations and Compounds.

The first part is little more than a translation of the original work. When required, however, clear and pertinent remarks are added on the tests; as in the case of acetic acid, iodide of potash, arsenious acid, etc. We have not space to critically examine this part of the work, but we may say that it seems to be well performed.

The second part is much more complete and useful than formerly. The diagrams and the notices of tests are improved; and the information regarding adulterations is greatly extended. Every article of the Materia Medica is separately treated of; and the manner in which the vegetable products are described, merits special praise.

We had intended to have taken this opportunity of entering at some length upon various topics connected with the *New London Pharmacopœia*, but we find that the demands upon the remaining pages of the current year render it necessary to postpone our remarks. In an early number of our volume for 1852, however, we hope to return to the subject of the *Pharmacopœia*, offering some criticisms upon its reviewers, as well as upon the work itself, its translators, and commentators. In the mean time, we have great confidence in commending Phillips' translation as a work admirably adapted to the wants of the prescriber, the dispenser, and the student. From its cheapness and elegance, as well as from its sterling value, we have no doubt of its having a large circulation, and a rapid sale.

[1] For an obituary notice of the author, vide p. 591 of our June number.

CRITICAL DIGEST OF THE BRITISH AND FOREIGN MEDICAL JOURNALS.

PRACTICE OF MEDICINE AND PATHOLOGY.

BELLADONNA IN SCARLET FEVER: THE ESSAY OF DR. PEYRE PORCHER.

Dr. Porcher has published a valuable essay in *The Charleston (U. S.) Medical Journal*, entitled "A Collection of, and an Examination into, the Evidences respecting the Employment of Atropa Belladonna, as a Preventive against Scarlet Fever." As the subject is an important one, we reprint nearly the whole of the paper.

Dr. Porcher's Essay. "In this paper, in which the task is for the first time attempted, since the appearance of Bayle's *Bibliothèque de Thérapeutique*, (which contains a pretty complete summary of the facts in his possession up to the time of its publication), we have been at the pains to collect and bring into one view all the information to be obtained touching the efficacy of Belladonna as a Prophylactic in Scarlatina. It contains the results of an examination of about four hundred volumes.[1]

"We insert the following list of works, to save future inquirers the trouble of going over the same ground.

London Lancet, 53 vols.
Medico-Chirurg. Review, 20 vols.
Brit. and For. Med. Review, 21 vols.
Brit. and For. Med. Chirurg. Review, 4 vols.
Edinburgh Journal, 70 vols.
Braithewaite's Retrospect of Medicine, 21 vols.
Ranking's Half Yearly Abstract, 4 vols.
American Journ. Med. Sciences, Old and New Series, 44 vols.
Medico-Chirurg. Trans., 18 vols.
Dictionnaire des Sc. Médicales.
Dictionnaire de Médecine.
Archives Gén. de Médecine, Juin 1824, containing the original papers of Martini.
Medical Commentaries, by Duncan, 19 vols.
Bell's Bulletin.
—— Library.
—— Journal, 4 vols.
Chapman's Med. and Phys. Jour., 9 vols.
Gedding's Journal, 4 vols.
Southern Jour. Med. & Pharm., 2 vols.
Charleston Med. Jour. & Review, 3 vols.
American Medical Journals generally.
Bayle's Bibliothèque de Thérap.
Mérat and de Lens's Dict. de Mat. Méd., 7 vols.
Barthez, Maladies des Enfants.
Billard, „ „ „
Eberle on Diseases of Children.
Underwood „ „
Churchill „ „
Condie „ „
Meigs „ „
Watson's Practice of Physic.
Trousseau and Pidoux, Traité de Thérap. et de Mat. Méd.
Dickson's Pract. Physic.
Craigie's Pract. Physic.
Macrobin's Introd. to Pract. Medicine.
Davidson and Hudson on Fevers.
Cyclopædia of Pract. Medicine.
Grave's Clinical Lect. on Practical Med.
Pereira's Mat. Medica.
Chapman's Mat. Med. and Therap.
Dunglison's „ „ „ „
———— New Remedies.
Mitchell's Mat. Med. and Therap.
Cazenave on Diseases of the Skin.
Rayer's Traité des Maladies de la Peau.
Gregory's Lectures on the Eruptive Fevers, 1851.
Trans. of American Med. Assoc., 3 vols.

"From the *Dict. des Sc. Méd.*, under article 'Belladonna', we draw the following remarks: Administered in small doses, it acts on the nerves in a

[1] "In searching among some of those obtained from the Medical Society's Library, we have to express our obligations to the librarian, Dr. Lockwood, for his kind assistance."

way slightly analogous to that of the narcotics generally; but it possesses, in addition, a marked stimulating action on the general capillary system, and the exalant system more especially, from whence results abundant transudation, and the more copious suppuration from ulcers, a more free secretion of saliva, of urine, and sometimes even an increase in the menstrual flow, and of the alvine evacuations.

"BELLADONNA—(*Mérat and De Lens's Dictionnaire Univ. de Mat. Méd.*, 1849)—from whence we obtain the following, which are among the phenomena of poisoning by this plant, viz.: vertigo, weakness, a kind of delirious joy, hallucination of sight, faintness, nausea, dullness, conjunctival injection, dilated pupil, immobility, gesticulations, and inability to articulate sounds; small, weak pulse, sometimes accelerated, a kind of insensibility in the skin, terror, etc. After a condition characterised by stupor, accompanied with mobility of the tendons and paleness of the countenance, death closes the scene.

"We beg leave to quote from remarks by Mr. Ley, before the Royal Med. Botan. Society, in London *Lancet* for June 1844. From experiments upon his own person, he is of opinion, that belladonna is much less dangerous than many suppose. Instead of its 'diminishing sensation, irritability, and arterial action, in the first stage of its influence, he believes that it increases them all, and that the peculiar action of the remedy being exhausted, reaction takes place, and its effects, to wit—diminution of sensation, irritability and arterial action follow.' He observes that, 'soon after taking a grain of the extract, there is a peculiar taste in the mouth, and a diffused novel sensation over the whole body, which excites the attention forcibly and unpleasantly, saliva is secreted in diminished quantity. The nervous excitement becomes absolutely painful, with restlessness, and with the attempt to move, giddiness, with an affection of the cerebrum becoming evident. There is difficulty in swallowing, and the voice grows hoarse; it is as if the action of the parts were impeded by great loss of lubricating moisture of the mucous membranes.' The eyes and eye-lids also become dry; pain in the bowels may occur, and, perhaps, an evacuation, but neither purging nor diuresis is caused by it; 'sore throat and redness of the skin, resembling scarlatina, is sometimes produced, and inordinate menstrual discharge may occur suddenly in females. The attention is so entirely absorbed by the peculiar sensation, and the irritability of system, that no pursuit can be followed, the eye can see, but is indisposed to maintain attention to the object, and the ear has sensation and hears peculiar noises. The disposition to withdraw from all the excitements of passing influences becomes active, and the retirement, like weariness, brings repose.' In this stage of excitement, Dr. Ley observes, it is not difficult to trace an increased arterial action approaching to inflammation, and this being the first and immediate action of the remedy, we ought to reckon the subsidence or evanescence of these effects among the virtues of the medicine.

"We must present the concluding observations of this gentleman, as they have some bearing on the inquiry before us. 'Dr. Pereira,' he continues, 'is of the opinion that belladonna is not fitted for plethoric constitutions, nor for febrile and acute inflammatory cases, in which Mr. Ley coincides; but he thinks it may be rendered so by combination with other medicines, or by preceding its use by blood-letting. It has been his habit, he says, to produce the excitement, and to allow the reaction to go on undisturbed for a day or two. He expects more benefit on the second or third day of inaction, than from the immediate effect of the drug. In this way relief is experienced in scrofulous ophthalmia, in tooth-ache, etc., when the state of excitement has passed away. A decided astringent effect is produced by the exhibition of belladonna, in some chronic discharges from the mucous membranes, and the secretion in ulceration of the trachea is diminished, and the cough relieved by it; various vesicular eruptions on the skin are also removed by

it, and when the contents of the vesicle have become semi-purulent, the true skin ulcerated, the ulcer being deep and devoid of healthy granulations, the edges being under the influence of the creeping vesicle, a single grain of the extract of belladonna will annihilate the eruption, and the ulcer will immediately assume a healthy appearance. This influence is well exemplified by that affection of the finger, where the cuticle is raised by a semi-purulent fluid around the nail. The cuticle being removed, the circle will still be enlarged by the separation of fresh cuticle, and the denuded surface pours out a copious discharge. 'The effect of one dose of belladonna is to dry the denuded surface, so that the disease no longer exists; and this is effected with so much rapidity, as almost to seem like magic.'

"Mr. Ley quotes cases from Mr. Liston's practice in University College Hospital, in one of which 'minute doses of belladonna cured an attack of erysipelas in two or three days'; and, in the other, a case of small ulceration on the legs, aggravated by a scald, and attended by much inflammation, 'after the fever was subdued, the belladonna speedily effected a cure.' Mr. L. finds a 'scaly, black, tobacco-smelling extract the best.'

"To repeat: Guersant, in *Dic. des Sc. Méd.*, states, that belladonna in small doses acts on the nerves in a way nearly analogous to that of the narcotics in general; but, besides, it has a marked stimulating action on the sanguineo-capillary system in general, and the exhalant system in particular, a consequence of which is the abundant transpiration its employment induces, as shown by its favourable influence on ulcers, an increased secretion of saliva, of urine, and even of the menstrual flow, and of the alvine evacuations.

"In the *Amer. Journ. of Med. Sciences*, O. S., vol. xix, 260, from *Journal de Chim.*, it is stated, that Dr. Chiorinth prescribed ʒiii of the oxide of zinc for a mare poisoned by ʒss of the extract of belladonna. The nervous system was greatly affected, the animal being attacked with palpitation and difficulty of respiration.

"In the 45th volume of the *Lancet*, there is a very complete paper by Dr. R. S. Hutchinson, on the action of belladonna, in which he contends that its action is on the spinal marrow and its nerves, and the very reverse of that of strichnine. The latter is stimulant upon this system of nerves, whilst the former is sedative. He gives it internally for neuralgias, in doses of a grain, three times a day. A number of cases are detailed by this gentleman. For its application in neuralgia, we may allude, in passing, to the papers in Bayle's *Bibliothèque de Thérap.* vol. ii; also, to the remarkable power claimed for it by a number of observers in curing cancer and scirrhus. Lambergen, Marteau de Granvilliers, and others, employed the infusion of the leaves with success in a number of cases of cancer of the breast. He supposes that, 'elle avait eu la vertu d'amenir une suppuration louable dans un cancer ouvert, et de résoudre le restant de la tumeur squirrheuse de la mamelle.' From the testimony of this gentleman, it acted very decidedly in changing the condition of the urinary secretions. 'By a peculiar and specific virtue, not only attacking and destroying the cancerous poison (le miasme cancéreux), which it diminishes in the blood, and as it exists in the mammary glands, but even carries it out through the urinary passages, in the same way as mercury and other specifics act in other disorders through the several secretions.' [Bayle.]

In a review of Chapman's *Lectures on the more important Eruptive Fevers*, etc., in the University of Pennsylvania, in the *British and Foreign Med. Review* for April 1846, we gather the following:

"'Dr. Elliottson mentions that, for nearly two years, all the children admitted into a particular ward under his care were seized with scarlatina, in consequence of a patient with the disease having been in the ward at that remote period, and this in despite of whitewashings and other cleansings.'

"Dr. C., who paid much attention to the duration of the incubative periods in contagion, observes:

" ' That of scarlatina is said to be from five to six days. My own conviction is that it is usually greater, though I speak diffidently on the point, having been unable to satisfy myself in regard to it. Equally subjected, apparently, to infection, I have seen individuals break out with the disease from the third to the eleventh day ; and we have had some cases recently reported, where, in a family of eight, the interval varied from the seventeenth to the twenty-sixth day, the average being seventeen days.' (p. 135.)

" The reviewer adds—' The professor is inclined to allow some weight to various powerful evidence in favour of belladonna as a prophylactic.'

" ' Yet, (he pithily adds,) by the assurance of Hahnemann, the author of the homœopathic doctrines, which originating in fraud and imposture, and continued by the most atrocious wickedness, that he was equally successful in the infinitesimal dose of a few drops, daily, of a solution which contained no more than the millionth part of a grain of the extract, distrust, and even ridicule, are cast over the whole affair, and our faith must be withdrawn and suspended till fresh and better evidence is afforded.' (p. 151 of his work.)

" ' To aconite, one day is the time which should be allowed for completing its action ; to belladonna, from three to six days should be given. In robust and active persons, who perspire much, the action of belladonna will be extinct in the course of about three days ; in persons in different conditions, its action may continue for six or seven days.'

" Belladonna as a Preservative against Scarlatina—experience of Dr. Schenck—(*Journal de Hufeland*, 1812.) From Bayle's *Biblioth. de Thérap.*, 391. Schenck, in inviting inquiries into the peculiar nature of the prophylactic property of belladonna, adds :

" ' Cet object est digne de la plus grande attention, et mérite qu'on le soumette à des expériences suivies ; car, se laisser prévenir contre ce moyen par l'extrême petitesse de la dose, se serait oublier qu'il est ici question d'un effet dynamique, c'est-à-dire, d'un effet sur le vivant, et qu'on ne peut apprécier ni par livres ni par grains. Quel est celui qui a pu déterminer pondérativement l'arome, ou bien la quantité d'un virus nécessaire pour produire un effet quelconque ? Etendre une substance, est-ce donc constamment l'affaiblir ? Et le liquide qui l'étend ne peut-il pas devenir un véhicule qui développe en elle une propriété nouvelle, un nouveau mode d'action plus subtil que celui qu'elle possédait auparavant.'

" In the *Lancet*, vol. xlv, for 1843, a reviewer contends that the eruptions produced by belladonna and that in scarlet fever are not identical, and that the former may be entirely accidental. He does not, however, furnish any numbers.

" Dr. Elliotson, in his *Practice of Medicine*, does not furnish us with any original information, but cautions the reader against the placing of too much credence in the preventive powers of belladonna.

" Tweedie, in his *Library*, states that he has no personal experience with the article. He mentions his having produced ' pain and redness of the fauces, with an efflorescence on the skin of the throat', by the administration of a sixth of a grain of belladonna three times a-day. He advises the making of experiments to test the question.

" Among the accounts unfavourable to the use of this preventive remedy, is one by Dr. Lehmann, published in the 22nd volume of *Rust's Magazine*, an abstract of which may be found in the *Amer. Journal*, vol. i, 1827, p. 207.

" In this memoir, he observes, that an epidemic appeared at Torgau, in 1825, of so violent a character, that one in eight of those affected with it died ; among these, thirty patients, all of tender age, fell victims. The belladonna was administered with confidence in many families in which the disease appeared, and there could be no doubt of the good quality of the extract ; nevertheless, it did not act either as a preservative, nor mitigate the severity of the disease. Dr. L. ' did not perceive any difference either in the violence of the disease, or its results, when it attacked those who had taken

the belladonna even for a long time, and in large doses, and those who had never taken the medicine.'

" Barth states (*Diss. Inaug. de Belladon. Scarlat. præsid.* Leipsic: 1827), that at Stratsund, in a frightful epidemic which prevailed, the belladonna did not act as a preservative. Dr. Mierendorf was said to have observed, that those children who took it were made more sick, and died in larger numbers than those who did not have recourse to it. Dr. Schmidt lost two children who had taken the belladonna.

" From a review of vol. ii of *Trans. of Prov. Med. and Surg. Association*, in *Brit. and For. Med. Rev.*, Jan. 1840, we find, in reference to a communication of Dr. Otto, on the diseases of Copenhagen, that 'belladonna is no longer regarded as a prophylactic against scarlatina.'

" Dr. Jos. Frank, (*Rust's Mag.* Bd. 22,) Teffel and Wagner oppose the administration of belladonna as a prophylactic; the first, however, on grounds purely theoretical.

" Review of articles by Kennedy, Belluomini, and others, on Scarlatina, in volume xvii of *Brit. and For. Med. Review*, 1844, p. 217.

" 'The results obtained', says the reviewer, 'were singularly conflicting.' M. Gondelle, in *Rev. Méd.*, Janvier, Mars, et Avril 1843, has published an exceedingly prolix essay on scarlatina, in which he labours to prove that belladonna is a prophylactic, 'but that its action, unlike that of vaccination, which destroys the liability to small-pox, is confined to removing the susceptibility to scarlatina during the time that it is employed, and ceases on its use being discontinued. Should this statement be substantiated, it may, perhaps, be the case, that the narcotic power of the belladonna, and of the kindred remedy aconite, blunts for the time the susceptibility of the constitution. On this supposition we might account for some who have been exposed to the contagion not contracting the disease. We confess that M. Guersant's favourable opinion of the prophylactic virtue of belladonna makes us hesitate, the writer adds, in the expression of our disbelief in its power. Still, it should be borne in mind, that the liability to scarlatina is much less than to small-pox and measles, and that many persons pass through life without being affected by it; and that the general result of the more recent experiments with the drug, were so much less favourable than those which were at first obtained, that Hahnemann was compelled to admit its frequent failure, and to resort to the supposition of a change in the fever in order to explain the fact.[1] For these cases he suggested the use of aconite, in which he is followed by Belluomini, and the rest of his disciples.' The following is extracted from the work of the author last cited:

" 'Belladonna is only a preservative against smooth scarlatina, and therefore it remains without effect when the prevailing epidemic is merely miliary scarlatina. Against this, the preservative is aconite. Now, as these two epidemics reign almost always at present promiscuously, whenever prudence suggests the use of a preservative, aconite and belladonna should be administered alternately. The doses of these medicines ought to be the same as those indicated for the dose, but taken at long intervals, beginning with aconite, when miliary scarlatina is dreaded, and with belladonna, if it be smooth scarlatina, and continuing the use of these medicines alternately.'

" Scarlatina, the best authorities assert, is an 'increasing malady', and its ravages progressively augment. In order to show that it is not apt to appear and suddenly disappear, we quote from Dr. Gregory's recent work on *Eruptive Fevers*, p. 182. The infecting distance of the miasm has not been investigated; but it is found that when it invades a school, no precautions avail anything towards preventing the spread of the infection. This has often been proved at the London Foundling Hospital. At Ackworth, in 1813, the

[1] " Those who wish to obtain a brief summary of the various experiments on the prophylactic powers of belladonna, are pointed to Meissner's *Forschungen*, vol. iii, S. 302, and vi, S. 441."

contagion lingered in the school four months, in spite of every effort. With regard to the susceptibility of this complaint, Dr. Binns tells us that out of 216 scholars at Ackworth school, 184 were affected. Dr. Adams remarks, that this is a larger proportion than is commonly found susceptible in districts or families. Like all other miasms, that of scarlet fever is capable of attachment to fomites, especially clothes.

" From *Archives Gén. de Médecine*, Juin 1824, which contains the original paper by Ernest Martini, which we also observe in Bayle's *Biblioth. de Thérap.*, ii, we find a pretty detailed account of the history of the remedy. We will translate and condense from this paper. In 1818, from a careful examination into the nature of scarlatina, Dr. Berndt came to the conclusion, that it was a disease affecting the nerves principally ; therefore, he thought, that whatever would excite the system might prove effectual as a prophylactic. Hence, the belladonna, recommended by Hahnemann in 1807, suggested itself to him, and he resolved to verify the opinions touching its efficacy. In order to obtain certain results, he employed the remedy upon individuals directly exposed to the contagion, and particularly on infants under five years of age, who are, it is well known, more apt to contract the disease. The doses used by Hahnemann seeming too minute, Dr. Berndt employed the following mixture :—℞ Extract belladon rec. parat. grs. ij, aquæ cinnamon. vinosæ unc. j, giving to children under one year three drops of this solution morning and evening ; three or four drops was given to those over two years of age, increasing the doses in the same proportion, according to the ages. Having used this treatment for a month or more, during the continuance of an epidemic, he had the satisfaction of observing that of 195 children exposed daily to the contagion, and to whom he administered the extract, there were but fourteen who, notwithstanding the use of the preventative, took the disease ; 181 continued exempt. The small proportion affected had the disease very mildly. Other experiments, made with three grains of the extract, given to a large number of persons exposed to the epidemic, were attended with the same happy results.

" In the London *Lancet*, p. 135, vol. xvi, we have, from *Hufeland's Journal*, some of the general deductions on the prophylactic powers of belladonna. Hufeland was led, both from his own experience, and that of a great many other practitioners, to form such a favourable opinion with respect to the powers of this medicine, that he is convinced that in epidemics of scarlet fever it ought universally to be resorted to, as the best means of preventing the disease altogether, or mitigating its violence. Among the conclusions are the following :—

" 1. The proper use of belladonna has, in most cases, prevented infection, even in those instances where, by the continual intercourse with patients labouring under scarlet fever, the predisposition towards it was greatly increased. 2. Numerous observations have shown that, by the general use of belladonna, epidemics of scarlet fever have actually been arrested. 3. In those few instances where the use of belladonna was insufficient to prevent infection, the disease has invariably been slight. 4. There are exceptions to above three points, but their number is extremely small.

" The Journal adds, that 'it seems that in some epidemics, belladonna has no protective powers at all ; the individual disposition, the method of using the remedy, and the quality of it, will, of course, have considerable influence on the result of the experiment.' The fresh extract is advised. *(Liter. Ann. der ges. Heilk.)* Effects of belladonna in preventing the contagion of scarlatina. From *Archives Gén. de Méd.*, Juin 1824, et *Journ. Comp. J.*, 1824, xviii, 369. See also *Edinburgh Journal*, January 1825.

" The discovery was made by Hahnemann[1] of Leipsic, in 1807, but he did not commence applying it till ten years afterwards.

[1] The parent of homœopathy; and a mystic long before he became an insensate quack.

" Berndt, who, as we before observed, was the first to make a connected series of experiments, says, 'that in the epidemics of scarlet fever, which prevailed throughout the city in 1818-19, he used the belladonna as a preventive in children under sixteen years of age, freely and continuously exposed to the contagion. Of 119 cases, 14 only were affected'; and he adds, 'that afterwards, when he used a stronger preparation, every one escaped the disease.'

" Dr. Behr of Bernberg, states, that of forty-seven individuals who took the belladonna as a preventive, six only were attacked with the disease. Koreff, a professor at Berlin, affirms, from a very extensive and long-continued experience, that the most intimate intercourse may be kept up with patients affected with scarlet fever, provided the belladonna be taken in the proper dose for eight or nine days before exposure, and be continued till the period of desquamation.

" Other statements to the same effect have been accumulated in the memoirs alluded to, so that there is no want of authorities for the facts. The quantity given has generally been small. Even if the belladonna does not act as a preservative, 'it is supposed by this writer that the disease is never fatal in those taking it.'

" From *Rust's Magazine*, in *Edinburgh Journal*, 1826. Dr. Randhahn, of the Orphan Hospital of Langladorf, in Prussia, testifies, 'that in one of the apartments of the hospital, two children were attacked with scarlet fever in February 1825, and one hundred and sixty others were exposed to it. A solution of three grains of the extract in one ounce of vinous infusion of cinnamon, was given to each in small doses during the whole month of February. Up to the 21st of April, when the report was made, not a single case had occurred ; and even two, who lived in the same chamber with those affected, did not suffer.'

" From *Hufeland's Journal*, in *Edinburgh Journal*, 1826, 242. Hufeland says :—'It gives him great joy to be able to confirm, by the results of fresh experience, the efficacy of belladonna, as a preventive against scarlatina. Five years have now elapsed since, in his Journal, the request was, for the first time, made to employ the belladonna with this view, and since that time, every year has brought fresh proofs of its power.'

" Dr. Kuntsmann of Berlin, employed the belladonna in every family in which he had an opportunity; in fact, in several instances, and with only one exception, always with success. In this case, as he afterwards found, the medicine had not been properly used. But as we see the scarlet fever only attacking certain members of a family, and sometimes leaving whole families unattacked, some doubts still remained in his mind about the efficacy of the medicine as a preventive of the disease. In January, however, of the year, a case occurred in his practice which, he said, tells very strongly for the alleged power of the belladonna. In an institution, of which he had direction, there were about seventy children of both sexes, from four to fourteen years of age. On the 25th of December, last year, the son of the director was attacked, and before Dr. R. was informed, two girls also, of four and seven years of age. He now separated the sick from the healthy as much as possible. Twelve drops of the mixture was the largest quantity administered. The disease afterwards made its appearance in no individual case until the 23rd of January, four weeks afterwards, when one boy was taken ; the case was of a very mild nature. 'The second son of the director, who took no belladonna, was attacked with the scarlet fever in a very high degree.' 'The children took the medicine six weeks in succession, and he never saw any bad effects from its continuance.'

" Hufeland attributes the efficacy of belladonna to its power of diminishing nervous susceptibility, without which one cannot take the disease. (*Gaz. de Santé*, Mars 1826.) No one knows the nature, the cause, or the kind of perturbation which follows its administration ; but to this perturbation Martini also

ascribes its preservative power. (*Rev. Méd.*, ii, 371.) M. Ibrélisle, physician at Metz, preserved twelve children from scarlatina with the belladonna, when the disease had attacked two hundred and six in the midst of whom they lived. (*Bull. de la Soc. d'Emulat.*, 1823, 201.) Dr. Velsen gave the plant to two hundred and forty-seven persons, of whom only thirteen took scarlatina. He gave two grains of the extract, dissolved in two ounces of water and two drachms of alcohol, of which fifteen to twenty drops were taken during the day. The inhabitants of entire villages in Germany, upon using belladonna, remained exempt, when the scarlet fever was in neighbouring ones. All the papers on the subject of the efficacy of the medicine as a preservative, were collected by Hufeland, in 1826, into one volume.[1] A few physicians, among whom we may mention Schwartze, did not coincide in the belief of this power in belladonna. (M. and De Lens, *cit. sup.*) Koreff, note communiquée à M. la Professeur Laennec, sur l'emploi de belladon. contre la contagion de la scarlatine. (*Bull. des Soc. Méd.*, i, 374.)

"Bayle, in 1830, published a notice favourable to the use of belladonna, by which it seemed that of 2027 individuals, in all, to whom it was administered, 1948 were preserved from scarlet fever, and 79 were attacked with it.

"Dusterborg, by means of belladonna administered for two weeks, preserved from scarlet fever all those who took the medicine. 'In order to ascertain the real value of the remedy, he purposely omitted to administer it to one child in every family; and this child alone, according to his report, was taken with the disease. He adds, however, that scarlet fever occasionally seized a child who had not been taking the remedy for three or four days, but it was, always, under these circumstances, mild, and often only manifested its presence by desquamation.'

"Zeuch, physician of the hospital for children in the Tyrol, after eighty-four children were attacked with scarlet fever, was induced to try the prophylactic effects of belladonna on the remaining sixty-seven. With a single exception, all were preserved from its attacks, though the disease was raging around.

"From Bayle, vol. ii, 508, we extract the RESULTS OF THE EXPERIENCE OF A NUMBER OF OBSERVERS.

	Took the Belladonna.	Preserved from Scarlet Fever.	Attacked.
Schenck	525	522	3
Rhodius	7	7	—
Massius	5	5	—
Gumpert	84	82	2
Berndt	195	181	14
Behr	47	41	6
Kohler	7	6	1
Wolf	132	126	6
Schenck	3	3	—
Benedik	10	10	—
Zeuch	61	60	1
Kuntsmann	70	60	1
Genecki	94	76	8
Maisier	170	170	—
	70	66	4
	300	280	20
Velsen	247	230	13
Total	2027	1948	79

"The *Edinburgh Journal*, vol. lx, p. 497, contains an abstract of an article from the *Bull. de l'Acad. Royale de Méd.*, 1843, by M. Stievenart.

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[1] "La Vertu Préservative de la Belladonna contre la Scarlatine, pp. 226. Berlin: 1826."

"The circumstances rendered any trial of this kind of double value, as, on account of the fatality of the epidemic, 30 patients had already died out of 96 seized. In a small village of 250 individuals, 200 took the belladonna and were all preserved from the attacks of scarlet fever. Of the 50 others, 14 were seized, and 4 died. At the village of Curzies, the same gentleman, Dr. Stievenart, administered the belladonna to the children at the public school, and allowed them to continue at their lessons, and have communication with the other children of the village : 'all to whom the belladonna was administered escaped the scarlet fever, but a few who refused to take it were seized with the disease'. Dr. S. employed two grains of the recent alcoholic extract, dissolved in one ounce of aromatic infusion ; two drops being given daily to a child one year old, or he gave one-tenth of a grain of the powder of the root twice a day. He generally continued it some ten or fifteen days. The small doses never produced a toxicological effect. In five or six cases, he observed a rash like measles. 'He thinks fifteen days sufficient to put the system under the influence of the preservative power of the remedy, but he recommends a recurrence to it if the epidemic returns, or breaks out with renewed violence.'

"Observations by Massius, Professor of Medicine at Rostock. (*Biblioth. Méd.*, xlvii, 260.) From Bayle's *Biblioth. de Thérap.*, ii, 394, we find that he relies from his own experience in the efficacy of belladonna as a prophylactic. In this he is sustained by Dr. Gumpert of Posen (see also *loc. cit.*), Maisier, of Magdebourg, and Velsen.

"From the supplementary volume, 1846, to Mérat and De Len's *Dict. de Mat. Méd.*, additional evidence is afforded us. Dr. Sazinot reports that of sixteen children to whom he administered belladonna as a preventive, twelve remained entirely exempt, although they were exposed to the contagion. Four of them had no eruption, but suffered from slight sore throat. (From *London Medical and Phys. Journal*, vi, 361, N.S.) Dr. Hillem-Kamp, during an epidemic of scarlet fever, prescribed the solution of the extract of belladonna to one hundred and five children, of from one to six years old; of this number, one half took the remedy regularly—twenty to thirty used it irregularly—from twenty to thirty did not take it at all. Of the first, five only had scarlatina; of the second, eight took the disease ; and of the last, eleven ; but of those who had taken the belladonna, none died. This gentleman used a solution of two grains of the extract in one ounce of water, giving morning and evening as many drops as the child had years. (*Journal de Hufeland*, Mars 1832.)

"From a review of Dr. Oppenheim's work on the *State of Medicine in Turkey*, in *British and Foreign Med. Rev.*, Oct. 1837, 393, we have the following statement of what is regarded as a 'marked instance of the prophylactic powers of belladonna in scarlatina', used on a large scale. 'The disease had also broken out among the troops in Monastir, where no separation of the healthy from the unhealthy was practicable; several soldiers had been carried off, and the disease had even snatched a victim from the Grand Visir's harem. The Visir, who loved his troops as his children, became alarmed, when I thought it my duty to make him acquainted with our preventive measures. He issued an order to his soldiers to take carefully a medicine that would be prepared for them; and as he set the example by taking it himself from the hands of his physician, they obeyed with less reluctance. As I had to fear that the counting of the drops would not be well attended to, I preferred the form of pills, in spite of the opposition of the apothecaries, who for a whole week were engaged in nothing else than in making pills, although only two battalions (1200 men) of regular troops were in the town. I directed one pound of extract of liquorice to be mixed with thirty-six grains of extract of belladonna, and the mass to be made into two-grain pills, of which each soldier was to take five, morning and evening. I entertained the hope that this dose, though smaller than usually prescribed,

would have the desired effect with men who had never taken any medicine, and who were all between the ages of fifteen and twenty-five; and the result answered my expectation; for, although the epidemic continued to rage in the city, and the soldiers were quartered on the Christian and Jewish part of the population, only twelve of all that had taken the belladonna fell sick, of which, however, one half died. In ten days previous to the administering of the medicine, more than forty cases of sickness had been entered on the sick list.'

"The London *Lancet*, vol. xxix, 1838, mentions, in a review of Professor Fleischman's *Practical Observations*, that the extract of belladonna (two grains to one ounce of distilled water) was given to fifty-two children, of from six to fourteen years of age. Each patient took, morning and evening, as many drops of the solution as he counted years, and this dose was in some instances increased. The remedy was thus administered during five weeks —the duration of the epidemic. Of the fifty-two individuals, forty-eight remained free from any attack, and four were affected with the disease. In two families, where the children commenced taking the remedy immediately on the disease attacking one of the family, all the children remained free from contagion, although they were in constant communication with the affected individual during the whole course of the disease. In twenty-three cases, Dr. F. remarked some of the ordinary symptoms of the action of the belladonna a few days after its use. Three were covered with miliary vesicles. Some of the conclusions drawn by this writer are, that it either counteracts the contagiousness of scarlatina, or that it diminishes the susceptibility to it—and that, when the disease does occur during its use, its character is much more mild.

"From Pereira, we learn that Bayle (*Bib. de Thérap.*, ii, 504), before alluded to, has collected from various publications 2027 cases of persons who took this medicine and were exposed to the contagion; of these 1948 escaped. Oppenheim (*Lond. Med. Gaz.*, xiii, 814) gave it to 1200 soldiers, and only twelve became affected. To these may be added Hufeland (*Lancet*, May 2, 1829) and Koreff (*Lond. Med. Gaz.*, iv, 297), who admit, from their own personal observations, the efficacy of the remedy, though they have not specified the number of cases in which they have tried it. But bearing in mind, Dr. P. adds, 'the well known capriciousness of scarlet fever in regard to the subjects of its attacks, and the large number of those who, though exposed to its influence, escape, the best evidence hitherto adduced in favour of the notion must be admitted to be inconclusive. While, therefore, the facts brought forward,' he continues, 'in favour of the existence of this prophylactic power are only negative, those which can be adduced against it are positive; for I conceive twenty cases of failure are more conclusive against the opinion here referred to, than one thousand of non-occurrence are in favour of it. Now Lehmann (see Bayle, *loc. cit. sup.*); Barth (*ibid.*); Wendt (Rust's and Casper's *Krit. Repert.*, xxii, 115); Muhrbeck (*Rust's Mag.*, xxiv, 485); Hoffmann (*ibid.*, xxv, s. 115); Bock (*ibid.*, s. 80); and many others that I could refer to, declare that it has failed in their hands to evince its prophylactic powers.' In this country, Dr. Pereira states, that we have no extended series of observations to quote; but the cases which he is acquainted with are decidedly against the efficacy of the remedy. A remarkable failure is mentioned by Dr. Sigmond (*Lancet*, 1836, '37, vol. ii, 78), of a family of eleven persons who took the supposed specific, yet every individual contracted the disease.

"Dr. Watson, in his *Practice of Physic.*, p. 1025, professes to have had no experience with belladonna as a prophylactic, though he advises the reader to give it a fair trial.

"The American editor of Watson, Dr. Condie, after noticing some of the arguments in its favour, says: 'We have ourselves given the belladonna to a number of children, on several occasions when the scarlet fever was prevailing epidemically, with a view of testing its prophylactic powers; but

although redness and dryness of the throat, and a diffuse scarlet efflorescence was produced by it, yet, in the majority of cases, we never found it in any instance to exhibit the slightest influence in shielding those who took it from an attack of the disease, or in mitigating in any degree its severity. In one case, the efflorescence produced by the belladonna was kept up for forty-eight hours; in a week afterwards, the child was attacked by the fever in the most virulent form, and died on the fourth day.' Dr. C. admits, however, that the testimony adduced by Steivenart is very strong in its favour, and that if the experiments, which were on an extended scale, were correctly stated and carefully made, 'they would go far to prove that belladonna *does* actually possess the property of shielding the constitution from an attack of scarlet fever.' We have already cited these experiments of Dr. S., which we obtained from another source.

"Dr. T. D. Mitchell, in his *Thérap.* and *Mat. Medica*, published in 1850, professes himself a believer in the prophylactic power of the article under consideration. The causes of failure he ascribes to using an inert article. He also cites Dr. Newbigging, 'who has recently tested the preventive powers of belladonna in a public institution', where seclusion had failed to arrest the spread of the disease; he gave the extract in doses of a sixth of a grain with marked success. (*Edinb. Monthly Journal*, Sept. 1849.)

"In Valenciennes, in 1846, four hundred children, we are told, were treated with belladonna to save them from scarlatina, then prevailing as an epidemic in the vicinity. All escaped, although only six had any efflorescence, and in one hundred and forty-five there was no apparent local manifestation of any kind.

"Dr. Mitchell, after alluding to the American testimony contained in Bell's *Bull. of the Med. Sciences* for February 1846, continues: 'And I add that I have employed the extract with such decidedly *preventive* efficacy, that it would be folly or madness to doubt. Again and again have I applied the aromatic solution, and have not only gained the desired result, so far as the *prevention* was concerned, but have allayed the perturbation of nervous mothers by exciting their confidence, and enlisting their fixed attention to its careful administration. This alone is worth all the trouble of the prescription.'

"Dr. Meigs, in his work on *Diseases of Children*, confesses to have had no experience, yet he admits the force of testimony adduced by others.

"Cazenave, p. 58 of his work on *Diseases of the Skin*, mentions that 'M. Biett saw the disease reign epidemically in one of the lofty valleys of Switzerland, and respect, almost without exception, children to whom the belladonna had been administered.'

"In the last volume (iii) of the *Trans. of the American Medical Association*, the Chairman of the Committee on Practical Medicine and Epidemics, Dr. J. K. Mitchell, observes as follows. As it is so pertinent, we will extract it entire. 'Too little attention has been paid to the subject of the prophylaxis of belladonna against the inroads of scarlatina. A careful examination of the recorded evidence, shows that no professional point rests upon higher proof than this. One of the committee having been impressed by the force of the evidence, endeavoured to put it to the test of a prolonged and varied experiment, with results of the most variable character. It is true that either scarlatina, or some disease very like to it, is often far from being readily propagated by contagion, whilst at other times it is rapidly disseminated from person to person. This fact renders very difficult a satisfactory solution of this question; but it may not be amiss to say, that with one failure out of thirteen experiments made in several different years, scarlatina has been apparently divested of its contagious power when treated by belladonna. In the last experiment, recently made, one of eight children in a single family was attacked with severe, well marked scarlatina. The other children, being immediately placed under the use of belladonna, were per-

mitted to have constant access to the apartment of the one attacked. All of them escaped the disease. Without segregation, so far as the subject has been examined, with but one exception, the unprotected have been thus preserved from the disease. The greatest difficulty lies in the scarcity of good extract of belladonna. But this may be obviated so soon as the demand will justify experiments for its better preservation. The best formulary is that which holds the alcoholic extract in solution in camphor water, and of this a quarter of a grain a day may be administered to a child of three years of age. These suggestions are made chiefly with a view to attract the attention of rural physicians to an experiment, which may be best examined in the very limited localities in which they reside.'

"From the report on Practical Medicine, by Dr. Austin Flint, in the forthcoming volume of the *Trans. of the American Medical Association*, the reporter states: 'Of the value of *belladonna* as a prophylactic agent in this disease (scarlatina), a member of the committee, Dr. R. Haymond, of Brookville, Indiana, expresses, in a letter to the chairman of the committee, strong testimony, based on a large opportunity for observation. He states that, for the last ten or twelve years, his attention has been directed to this subject; and that, during this period, he must have administered this remedy, for that end, in between two and three hundred cases. Of the whole number, but *two* have ever contracted the disease, and in both these cases, the disease was mild and easily managed. In both instances, the eruption varied from the usual appearance, the red points being larger and more distinct, resembling somewhat the eruption of measles.'

"In an article in the *Southern Jour. Medicine and Pharmacy*, vol. i, No. 1, we find an article by John S. Erwin, M.D., entitled 'A Short Sketch of Scarlatina', from observations made during the epidemic of 1843, in Buncome Co., N. C. From the way in which it made its appearance, Dr. E. was led to the opinion that it spread independently of communication. He says that the statement of Dr. Green, that those who 'have taken the medicine generally escape the disease altogether, or, if they do become affected, have it in the mildest possible form', agrees precisely with what he knew to be facts. 'During the prevalence of the epidemic, Dr. Hardy gave notice that he would prepare the belladonna for all who wished to try the experiment. Anxiety, of course, led many parents to avail themselves of this their only hope; he followed the original mode of prescription, dissolving three grains of the extract in one ounce of cinnamon water, and directing two or three drops, morning and evening, to a child under one year old, and one drop for every year above that age. He and myself kept an account of two hundred and fifty children, who took it thus; and of that number, less than half a dozen had the disease, and they had it very mildly. After eight or ten days' use of the medicine, there was an eruption over most of the surface, in some cases profuse and troublesome from itching. Those families which did not take the preparation, had the disease with scarce an exception. I recollect a remarkable incident that occurred in a particular neighbourhood. A poor woman, with a family of sixteen children, used it carefully according to directions, and it is notorious that her family alone escaped, when hundreds were attacked. Many other striking cases might be enumerated to prove its efficacy, both there and elsewhere; but, to avoid prolixity, they must be omitted. Dr. McKee, in the extension of the same epidemic, exhibited the belladonna with the same astonishing powers of prevention. These facts coming under my own observation, I cannot but believe it to be almost an infallible prophylactic when properly used.'

"The result of our inquiries among some of the medical gentlemen in this city, is as follows. We may add, that few had the opportunity of making accurate observations. Dr. S. H. Dickson has not found it effectual in preventing the appearance of scarlet fever, though he has not given it an extensive trial. Dr. E. Geddings, also, is not disposed to put much faith in it.

Drs. Moultrie and Prioleau have seen no particular effects. Dr. H. R. Frost informs us that he has recently been administering it to forty or more persons, and he is impressed with its beneficial influences. Drs. Lebby and Robertson, from a comparatively limited experience with its use, are inclined to rely upon it. Dr. Cain has used it in a number of cases, and he thinks very favourably of it; he saw but one instance when a child with the eruption of belladonna took the disease, and that in a modified form, and it recovered. His own child had a very thick rash on the face from taking the belladonna. Dr. Ogier, though he cannot furnish the numbers, has experienced such benefit from its use that he confides in its prophylactic powers. Dr. De Saussure has tried it on a few occasions, and thinks favourably of it. We have ourselves administered the belladonna to several persons; none of these, though exposed to the disease, suffered from it. We did not notice the scarlet efflorescence.

"From the *Minute Book* of the Charlestown Orphan House, we find, from the physician's annual report for the year 1838, that a 'frightful epidemic of scarlet fever' prevailed. There were 136 inmates, including 114 children, 12 officers, and 10 servants; of the first, 67 had the disease. Through the kindness of Dr. George Logan, the attending physician, and of Mr. Campbell, the superintendent of the house, we are enabled to make the following abstracts. We gather from the symptoms related, that the disease showed itself in by no means a mild form; yet of the 67 who suffered from it, only one died. 'The progress of the disease was here arrested, and more than two months have elapsed since its entire disappearance. That almost fifty inmates of the house, generally alike predisposed in constitution, and alike exposed to contagion in its active stages, should have escaped, is indeed a pathological fact worthy of record, which neither the admission of accident nor idiosyncracy can explain. Was it attributable to a returning salubrity of the locality? or shall we venture to ascribe it to the persevering exhibition of belladonna, which was carefully administered for three weeks, morning and evening, in accordance with the views of Dr. Hahnemann, of Leipsic, and also of Dr. Koreff, of Berlin, who employed it with extraordinary success as a prophylactic.' Dr. L. remarks upon the similarity between the effects produced by belladonna, and those by the administration of arsenic.

"In reviewing the testimony afforded by the preceding facts, our opinions, if we are allowed to express them, are decidedly in favour of the prophylactic power of belladonna. However some may consider the evidence of a negative character, and therefore unworthy of confidence, yet, from its cumulation, from the careful way in which some observers conducted their inquiries, and from the possibility of failures[1] being owing to the use of an inferior or badly prepared drug, we cannot but conceive that to discard it as utterly indecisive, would be indulging a spirit of irrational incredulity, leading to the rejection of any amount of merely presumptive proof. But assuredly under circumstances like these, granting that the efficacy of the means is only problematical, none should hesitate to employ measures so simple in their application, and so safe in their consequences. The failure to avail ourselves of the prophylactic influences of belladonna, we cannot now but regard as a violation of those sacred obligations, which force us to leave nothing untried which *may* contribute so largely to the mitigation, or eradication, of one of the severest inflictions of the hand of God.

"After carefully considering the nature of the action of belladonna, and the nature and course of, and the pathological phenomena accompanying scarlatina, in order to endeavour to ascertain what relations there may be between the administration of the one, and the existence, or non-existence of the other, we draw the following conclusions:

"Belladonna, in the comparatively small doses used, may not, it is true,

[1] Frequently, we suspect, to inadequacy of the dose. Ed. Lond. J. of Med.

have the same toxicological effects that larger quantities produce, yet, either in large, or in continued small doses, we find that it acts, first, on the external cutaneous surface, stimulating the sanguineous capillaries in general and the exhalants in particular, as shown by the scarlet efflorescence, and by the more copious discharge from ulcers; 2nd, on the internal mucous membranes, producing dryness, heat, and swelling of the throat and fauces; and, 3rd, on the nerves, affecting the entire cerebro-spinal system with its ramifications, inducing delirium, dilatation of pupil, relaxation of muscular fibres generally, a kind of narcotism, and, finally, death.

"All of these it may, and probably does, reach, by being received into the blood.

"Now in scarlatina, whatever be its true nature, we find the onus of the disease resting upon these very organs, and influencing these very functions, which we observe most liable to be affected by the belladonna. We need not cite the usual and well-known train of symptoms so characteristic of the disease.

"May not, then, the prophylactic power of the drug, gradually introduced, depend upon an antagonism going on. The influences induced by it gradually modifying the condition of the organisms and their functions, may weaken or destroy the noxious agent—or, the general nervous erythism in which the system is thrown, may render it insusceptible to the incursion of the epidemic, which seeks for its seat, as we remarked, precisely those localities pre-occupied by the drug, supposing it to have been previously administered.

"Moreover, in scarlatina, from the disturbance to the healthy play of affinities throughout the entire system, renal derangements are of frequent occurrence, and our therapeutic resources are consequently directed to this important secretion. Belladonna, from the observation of those who employed it for cancerous affection, as well as for the prevention of scarlatina, is shown to produce a very decided determination towards, or free secretion from, this great emunctory. May not this also be one of the channels through which it exerts so beneficial an influence? So powerful was the effect produced upon the kidneys and bladder, that to this some of the early writers attributed its ability to cleanse and purify the blood, and hence to eradicate the cancerous diathesis.

"In a word, belladonna, by its obvious action on the several parts of the body, or on its functions, may so impregnate, or produce such a condition or *status* of them, as materially to modify, neutralize, or destroy, the noxious influences of a virus or miasm (scarlatina), which is about to seize upon, multiply itself, or be absorbed, in the same parts, or act upon the same functions of the system."

TRICHIASIS OF THE URINARY PASSAGES; PILIMICTION.

M. Rayer has published an elaborate article on the above subject, in the *Gazette Médicale* for August 2, 9, and 16, 1851. He had never seen a case in which hairs were passed in the urine, until a child, in whom this occurred, was sent to him by Dr. Paulin.

Hippocrates is supposed by some to refer to urinary trichiasis in the following words. "When thick urine contains small pieces of fleshy substance, or hair-like matters, it is from the kidneys that these are furnished."[1] This is Galen's reading, in his commentary; and M. Rayer thinks it likely that he had seen both flesh-like substances (clots) and hair-like filaments, excreted with the urine; but that Hippocrates speaks of but one thing—*small hair-like fleshy substances.* Celsus, in speaking of *caruncule quædam*

[1] *Ὁκοσοισιν ἐν τῳ οὐρῳ παχει ἐοντι σαρκία μικρὰ, ἢ ὥσπερ τρίχες ξυνεξέρχονται, τουτέοισιν ἀπὸ τῶν νεφρῶν ἐκκρίνεται.*

exiguæ quasi capilli in the urine (*Lib.* ii, *Lect.* 7), very probably refers to filaments of fibrin : and the same remark may be made with regard to the Arabian writers. Altogether, the old authors speak often enough of substances *like hair* passed with the urine ; but there is no distinct reference to true hairs.

M. Rayer examines the subject under the following heads.

I. Hairs in the kidneys, or rather in the pelvis :—in the ureters ?

II. Hairs found in the bladder, and developed in the urinary passages.

III. Hairs found in the bladder or passed with the urine, proceeding from tumours which have opened into the bladder.

IV. Hairs in the prostate, or the urethral canal.

V. Hairs in urine, containing also mucus, blood, pus, or other foreign matters.

VI. Hairs in the urine of persons who have uric acid, gravel, or calculi.

VII. Hairs encrusted with phosphate of lime and phosphate of magnesia, and sometimes with a certain proportion of uric acid (*gravelle pileuse* of Magendie) : also hairs serving as the nuclei of phosphatic and other calculi.

VIII. Hairs in the urine ; gravelly matter of uncertain nature : purulent urine.

XI. Hair-like filaments, and hairs of animals found in the urine, sediments, gravel, or calculi, and mistaken for human hairs.

I. Hairs in the Pelvis of the Kidney, or in the Uterus. M. Rayer has, with others, sometimes found fibrinous filaments in the ureters, formed of blood from the kidneys ; and he thinks that the remarks of Hippocrates and Galen may apply to these. Bichat alone enunciates the fact, that hairs sometimes grow from mucous surfaces, as the stomach, intestines, or bladder : but he does not bring forward sufficient proof, although it is rather difficult to believe that so accurate an observer should have been deceived. There is no case to prove the formation of true hairs in the ureters.

II. Hairs developed in the Urinary Passages, and found in the Bladder. J. F. Meckel says that the bladder is sometimes bristled with hairs (*herissée de poils*) ; but this is rather a presumption deduced from pilimiction than an anatomical fact. Hoffmann, in the *Ephem. Natur. Curios.*, centaine v and vi, observ. 45, relates the case of a child, aged 6 years, who had strangury and tenesmus, with dysuria, and emission of hairs. It died ; and two calculi were found in the bladder, as well as fine hairs, straight or rolled up, scattered here and there. M. Maillet, as well as M. Rayer, have seen hairs in the stomach of the horse ; but have not been able to find them in the human stomach, nor in the urinary organs. The latter point, however, requires further investigation.

III. Hairs found in the Bladder or passed with the Urine, and furnished by Tumours opening into the Bladder. Hairs have sometimes been found, either free or attached to portions of membrane, in the bladders of women who have, during life, presented a tumour of greater or less size in the neighbourhood of one of the ovaries. After death, it has been ascertained that the cyst has opened into the bladder, with the walls of which it had become intimately adherent. It will hence be readily understood, that the pilimiction which some of these patients have presented during life is altogether distinct from true trichiasis, or growth of hairs in the urinary passages.

Several cases of this kind have been collected by M. Rayer, from various sources.

Dr. Amos Hamelin, of Durham, New York, related the case of a woman, aged 24 years, who was delivered at full term of a dead infant. Six days after, she was attacked with puerperal fever, and died on the twenty-second day. On *post-mortem* examination, a tumour, as large as a hen's egg, was found near the right ovary. It was adherent to the bladder, into which

there projected from the tumour a large bunch of hairs, which were from four to twelve inches long. The tumour contained osseous matter, and a small quantity of cerebriform substance.[1]

M. Delpech relates the case of a pregnant woman, who passed hairs with her urine ; and this state continued after she was delivered. Suspecting that there was a calculus in the bladder, M. Delpech incised the urethra, and removed a small calculus with several bunches of hairs. Two months after, the patient was again seized with pain, and again passed hairs. The bladder was again examined, and from it was removed a substance as large as an egg, having at one end a piece of membrane in which were implanted hairs, and enclosing a piece of bone like a zygomatic apophysis. The piece of bone contained a molar tooth, like that of a child five or six years old.[2]

Dr. Edward Philips, of Andover, relates the case of a woman, 30 years old, who had had dysuria from her youth. At 28 years of age, she had inflammation of the bladder, which was treated by antiphlogistics. A tumour was felt, extending from the lower surface of the liver towards the umbilicus. The patient died after having had symptoms of peritonitis. An encysted tumour was found in the right ovary, containing a creamy matter, and a tuft of hairs ; and the same substances were found in the bladder. At the inferior and posterior part of the latter organ, there was a cyst filled with creamy matter and hair, and also containing an incisor tooth, implanted in a piece of bone resembling an alveolus. The specimen is preserved in the Museum of the Royal College of Surgeons of England.[3]

M. De la Rivière, junior, gives an account of a woman, aged 58, who complained of pain in the hypogastric region, with dysuria. Catheterism was followed by an abundant evacuation of pus, which gave some relief. The symptoms returned ; she had purulent urine, vomiting, and diarrhœa ; and died. The bladder was adherent to the uterus : it contained some pieces of bone, and a roll of interlaced hairs, with purulent matter.[4]

M. Hippolyte Larrey gives the case of a woman, 33 years old, who, after three pregnancies, presented symptoms of which the following is a summary : a tumour as large as an egg in the left iliac region ; abscess in the hypogastrium, followed by fistula, from which proceeded pus, hairs, and urine ; emission of hairs with the urine ; a calculus, with hairs as its nucleus. A hairy tumour and a calculus were removed, and she recovered.[5]

A case evidently analogous to the preceding is recorded by Schenck, in his *Obs. Med.*, lib. iii, *De Urinis*, ob. 24, p. 486, as having occurred in an Apulian woman in the year 1573.

In several cases also, where the *débris* of a fœtus have been passed through the rectum and bladder, it is very probable that there were hairs.

IV. Hairs in the Urethra, and in the Prostatic and Seminal Ducts. No true case of this kind has probably been observed ; but fibrinous or purulent filaments have doubtless been mistaken for hairs.

V. Hairs in the Urine, which at the same time contains Mucus, Blood, Pus, or other Foreign Animal Matters. Cases of this nature have been recorded by Tulpius, Fabricius Hildanus, Spielenberger, and Zacutus Lusitanicus ; but M. Rayer suspects that the hairs were introduced from without. In two of the cases, they much resembled hog's bristles ; and, in Spielenberger's case, they were of the same colours and size as those

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[1] Extracted from the correspondence of Dr. Valentin, in the *Bulletin de l'Ecole et de la Société de Médecine*, 1808, No. 4, p. 58.

[2] Communicated by M. Boyer to the Acad. Royale de Médecin. *Rev. Méd. Française et Etrangère, et Journ. des Clin.*, 1827, t. iv, p. 487. Reported more fully by M. Delpech in his *Chirurg. Clin. de Montpellier.* Paris : 1828.

[3] Medico-Chirurgical Transactions, vol. ix, 1818.

[4] Related in *Journal de Médecine, Chirurgie, et Pharmacie, etc.*, tome x, p. 516.

[5] In *Memoires de l'Acad. de Médecine*, t. xii.

of the lap-dog belonging to the lady who passed them. The *Gazette Médicale* for 1851, p. 192, contains a case of cystic trichiasis, by M. Kræmer, occurring in a man 42 years of age. The hairs were finer than those of the head ; and were not those of the pubic region.

VI. HAIRS IN THE URINE OF THE SUBJECTS OF URIC ACID GRAVEL OR CALCULI. M. Rayer remarks, with regard to Dr. Golding Bird's observation that crystals of uric acid are often formed round a hair, that it is more likely that the hairs have been accidentally mixed with the urine, than that they have been passed with it.

M. Rayer relates the case of a boy ten years old, who was sent to him by M. Paulin. The child had been accustomed to a tonic and highly nitrogenised diet from infancy. Small hairs, and fragments of hair, which could not be easily accounted for, were passed in the urine ; and the sediment contained groups of microscopic uric acid crystals.

Dr. William Henry has recorded the case of an old gentleman who passed hairs, with uric acid gravel. No details are given of the treatment or the termination of the case.[1]

M. Rayer also refers to the case communicated by Mr. Paget, of Leicester, to the Medico-Chirurgical Society[2] last year, in which the urachus remained open, and a ring-shaped calculus, formed on a hair in the bladder, was extracted through the umbilicus.

VII. HAIRS ENCRUSTED WITH PHOSPHATE OF LIME OR OF MAGNESIA, AND SOMETIMES WITH URIC ACID : ALSO HAIRS SERVING AS THE NUCLEI OF CALCULI, PHOSPHATIC, OR OF UNKNOWN COMPOSITION. M. Magendie describes, in his *Recherches Physiologiques et Médicales sur les causes, etc., de la Gravelle*, an affection which he terms *gravelle pileuse*, in which small hairs, from a line to an inch or more in length, are passed with the gravel. M. Civiale, in his *Traité de l'Affection Calculeuse*, says, that he has often found dry mucous filaments among the gravel ; and still oftener, hairs introduced from the dust floating in the atmosphere. M. Rayer believes that he here alludes to pieces of cotton, wool, etc., which may easily escape from the clothing, etc. ; and these can readily be distinguished from real hairs. He quotes the details of two cases, in which gravel and small calculi were mixed with hairs in the urine : one is related by Mr. James Mitchell, in the *Edinburgh Medical and Surgical Journal* for July 1828 ; the other by Mr. Edward Parker, in vol. xxvii of the *Medico-Chirurgical Transactions*.

Some of the observations of Sir B. Brodie, M. Civiale, etc., on the formation of calculi round hairs as a nucleus are referred to. M. Rayer doubts the vesical origin of these hairs.

VIII. HAIRS IN THE URINE; GRAVEL OF AN INDETERMINATE NATURE ; PURULENT URINE. Under this head is given the account of an interesting case, which formed the subject of a scientific correspondence between Sir Hans Sloane, Dr. Yonge, of Plymouth, and Mr. J. Powell, at the early part of the last century. The correspondence is given in the *Philosophical Transactions* of that period. The subject was a plethoric woman, 50 years old. She had frequent nephritic pains, with purulent and gravelly urine. In the progress of the case, during an attack of pain, she passed a large quantity of matter containing a tuft of small hairs. Leeuwenhoek examined some of them, and believed them to be filaments of wool.

IX. HAIR-LIKE FILAMENTS IN THE URINE, IN THE SEDIMENTS, IN GRAVEL, OR IN CALCULI, CAPABLE OF BEING CONFOUNDED WITH HUMAN HAIRS. Under this head M. Rayer includes,—

1. Fibrinous filaments, more or less decolorised.
2. Mucous filaments, concrete or dried.

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[1] Medico-Chirurgical Transactions, vol. x, 1819.

[2] Medico-Chirurgical Transactions, vol. xxxiii, 1850.

3. Filaments of coagulated albumen ?—described by Dr. G. Bird, but thought by M. Rayer to be more probably casts of tubes.

4. Confervæ, etc., developed in the urine or on its surface some time after emission.

5. Filaments of linen, cotton, or wool, coloured or not.

6. Hairs of other animals, added accidentally or intentionally to the urine after it has been passed.

Conclusions. The hairs which are sometimes observed in the urinary passages, in the urine, in gravel, or in calculi, may arise in one of three ways:—1. By being formed in the urinary passages (trichiasis); 2. By being evacuated from cysts; 3. By being introduced from without.

1. *Trichiasis of the urinary passages* is a very rare affection. The number of cases in which it is alleged to have taken place is much reduced, when we remove from them those in which the urine was not examined as soon as it was voided, and those where the true nature of the hairs has not been established. Trichiasis is characterised by the emission of hairs in urine, either not sensibly altered in its appearance and composition, or containing more or less mucus, blood, or pus. The hairs may be intermingled with uric acid or phosphatic gravel; they may also be deposited on the surface, or disseminated in the interior, of calculi.

The emission of hairs sometimes takes place without pain (simple trichiasis); but it is more frequently accompanied by such complications, as dysuria, and sanguinolent, or purulent urine, etc.

The causes of this singular affection are quite unknown. From the cases observed, it appears most frequently to coexist with inflammation of the mucous membrane of the urinary passages, with gravel, or with calculi. Trichiasis has been observed in children, adults, and old persons, both male and female.

Nothing is yet known of the arrangement of the hairs, or of the anatomical state of the mucous membrane in trichiasis of the urinary passages; Maurice Hoffmann and Bichat having unfortunately omitted to examine the mucous membrane in those cases in which they allege that they found hairs in the urinary organs after death.

When trichiasis coexists with uric acid gravel, the employment of alkalies is indicated, as in simple gravel; acids are preferable when it is phosphatic gravel that the hairs are mixed with. For inflammation accompanying trichiasis, the ordinary antiphlogistic remedies are to be employed.

2. *The evacuation of hairs from cysts* constitutes a distinct pathological condition. These cases of pilimiction have only been observed in women; but the facts are generally well authenticated. This form is distinguished from ordinary pilimiction by the existence of a tumour, generally in the vicinity of one of the ovaries, and which can be recognised by a careful examination *per rectum* and *per vaginam*. The knowledge of any accidental circumstances which may have preceded the pilimiction will render the diagnosis more easy; while the emission or extraction from the urethra of pieces of membrane covered with hair, fragments of bone, teeth, etc., will confirm it. The surgeon may sometimes render very efficacious aid to nature by promoting the expulsion of hairs, teeth, calculi, etc., or by extracting them.

3. *The introduction of hairs into the bladder from without* is rare, but has occurred. A bunch of hairs, introduced into the bladder, has been known to become the nucleus of a calculus. Some surgeons believe that hairs may be introduced with the catheter; and M. Rayer has found hairs, filaments of wool, linen, and cotton, with fragments of calculi, often enough to lead him to suppose that they were introduced during lithotrity.

DR. JENNER ON THE USE OF THE NEUTRAL SULPHITES IN THE TREATMENT OF DISEASES ATTENDED BY THE DEVELOPMENT OF PARISITIC PLANTS, ESPECIALLY THE SARCINA VENTRICULI.

In the *Medical Times* of the 23rd August, there is an interesting Clinical Lecture, of which we give the following abstract. Dr. Jenner has certainly added to the therapeutic resources of the physician, and thrown new light on the nature of a rare disease.

I seize this occasion of illustrating the advantages that the science of medicine has derived from the progress of the collateral sciences, and of proving to you that the microscope is not a mere toy for the non-practical man, but, "one aid the more" in enabling us to determine the disease under which the patient labours, and *so* of treating him the more successfully, and that a knowledge of chemistry may serve, in some cases, to direct us in our choice of remedies. * * * * *

Case. James Martin, now aged sixty-six, the son of healthy parents, who died at the ages of eighty-two and eighty respectively, enlisted into the Artillery when eighteen years of age. He was discharged in 1824, and was working in the Thames Tunnel when the water broke in. In 1829, he entered the police force, in which he continued for seven years. After leaving it, he entered the Queen of Spain's service, and returned with the Legion in 1837. Though formerly of intemperate habits, he avers that for many years he had been very sober. With the exception of an attack of ague while in America, his health, up to the time of the accident in the Thames Tunnel, was excellent. From that event, he dates the commencement of his present ailment. While in the police, he suffered from intense pain in the epigastrium, and used often to retire into back streets, and there lean with his abdomen firmly fixed against an iron post. At first, the vomiting occurred once or twice a week; afterwards, every day. It was at this time, he says, that he first vomited blood. From the time of the accident he has been subject to constipation, for which he long tried all sorts of quack medicines; and, to relieve the pain in the abdomen, he took a teaspoonful of carbonate of soda twice a day.

In the early part of 1838, he entered University College Hospital, and, by his own account, has been unable to work since. He has been, at different times, both an in and an out-patient at this and other hospitals, and, on one occasion, was an inmate of the parish infirmary. He was an out-patient when I was appointed to this hospital, but too ill to attend himself. His wife came for his medicines. It was in consequence of the description she gave of the vomited matters (viz., that they frothed over the vessel in which they were received, like yeast), that I examined them microscopically. I then found the bodies described by Mr. Goodsir, in 1842, as sarcina ventriculi.

[Dr. Jenner visited the patient a year ago; and his state then was much as on admission into the hospital.]

While an out-patient, I tried for his relief nitrate of silver, hydrocyanic acid, creasote, morphia, henbane, large doses of carbonate of soda, etc. I thought the morphia lessened the frequency of the vomiting, but, although it produced drowsiness, it seemed to increase the pain. With difficulty I persuaded him to come into the hospital; and, so satisfied was his wife that death would speedily terminate his sufferings, that, after he had been in a few days, she earnestly entreated me to discharge him, lest he should die here.

He was admitted as an in-patient March 15th, 1851, and on the 16th the following notes of the case were taken:—Mind and special senses normal; *arcus senilis* strongly marked; can walk with facility, but feels weak; expression worn; is extremely thin; skin cool; mucous membranes pale; no sallowness of complexion, no anasarca, legs drawn up towards his abdomen, and his arms around his knees, shoulders bent forwards, his head resting on

the elevated inferior extremities ; tongue large, flabby, indented at the edges, and thinly furred ; no dysphagia ; appetite generally good ; had for his dinner yesterday two potatoes and some broth ; dined between twelve and one o'clock ; at five o'clock, P.M., vomited, ejecting the whole of the matters now in the basin in about five minutes ; the quantity of ejected matter reserved is two quarts.

Characters of the Vomited Matter. Floating on the surface is a layer, from a quarter to half an inch thick, of a brownish colour, closely resembling yeast in general characters, entangling in its substance quantities of air-bubbles. *Microscopical Elements.* Striated muscular fibres : sarcinæ ventriculi in great numbers, of a dark yellowish colour ; torulæ very numerous, undistinguishable from the yeast-plant in size and shape ; fat globules and starch.

After eating his dinner, felt comfortable and satisfied for two hours, then experienced considerable thirst ; about four o'clock, P.M., took a cupful of cold fluid. He thinks that cold fluids excite vomiting, hot prevent it ; that cold fluids cause pain, hot fluids relieve it ; from the time of drinking the fluid he felt severe burning twisting pain over nearly the whole abdomen ; the burning pain was most severe about the epigastric region, the twisting pain about the umbilicus ; to use his own expression, "he felt in a burning flame"; much flatus was discharged before vomiting, chiefly by belching ; each eructation of flatus was attended with severe sense of burning up the centre of the sternum, called by the patient "a flashing pain"; after vomiting, the pain and burning were considerably relieved ; still the pain continued during the whole night, increasing in severity at intervals. Five grains of extract of colocynth, with two drops of croton oil, were taken last night ; these operated about eight o'clock A.M., producing three stools ; the action of the bowels relieved a sensation of tightness. He had this morning for his breakfast, about eight o'clock A.M., a cup of tea and a little bread and butter. At twelve o'clock, complained of a nipping pain between the umbilicus and pubes, a burning pain from the epigastric region upwards over the right mammary and sternal region ; no vomiting to-day ; complains of tightness and fulness of abdomen. Abdomen convex ; convexity less marked at epigastric and hypochondriac regions, than below the umbilicus ; interval between recti-muscles distinct ; tenderness in epigastric and umbilical regions ; slight tenderness also in hypogastric, more in hypochondriac and umbilical regions. Some sense of resistance on pressure over recti-muscles ; resonance generally normal ; no tumour to be detected in any part of abdomen : there is, however, greater fulness in the vicinity of the pylorus than elsewhere (from tenderness and distension, the manipulation was less deep than subsequently) ; passes his urine freely ; pulse 60, regular ; lungs[1] and heart generally healthy, only the second sound at the base is murmurish. The stool contains a large amount of yellow amorphous matter, sarcinæ, and triple phosphates ; its reaction alkaline.

The daily reports from this time tell of his continued suffering ; of the frequency with which he was observed in (what is termed, in some of the reports) his old position.

On May the 29th, the report states him to have been much freer from pain. All sense of "flashing burning" gone ; lies ordinarily with legs extended, as if free from pain. His present state offers a striking contrast to his condition on admission. Bowels acted to-day. No stool the preceding three days.

As the hardness of the abdomen disappeared, and the distension diminished, it was pretty clearly made out that the stomach was dilated, the stomach-note being audible to the umbilicus ; and an ill-defined solid body was imperfectly felt about two inches to the right of the middle line, midway between the umbilicus and cartilages of the ribs.

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[1] The case has been much abridged as regards the organs not bearing directly on the disease.

His present state you have all witnessed; he suffers little pain; is freed from the eructation of flatus; his position is unconstrained; his abdomen is much less full than on admission; he is gaining flesh; the worn expression is comparatively trifling, and he sleeps well. The alteration in his general carriage and position strikes his wife and friends most forcibly. It is, he affirms, many years since he enjoyed the same state of comfort. I must briefly advert to the condition of his urine. It is acid when first passed, but becomes alkaline rather more quickly than healthy urine should. One of my excellent clinical clerks, Mr. Simpson, has been kind enough to examine it daily for some time, and he notices no difference in the degree of acidity, as manifested by litmus paper, whether Martin is vomiting or not. An analysis of the matter vomited before the man's admission to the hospital, was kindly made by Professor Graham. It contained a large excess of free hydrochloric acid, a little acetic acid, alcohol, and sugar; the gas disengaged was carbonic acid. It was identical, in all essential particulars, Mr. Graham says, with the matter vomited by a man suffering from sarcina ventriculi, under the care of Dr. Bence Jones, in St. George's Hospital.

Now, did the primary disease in the case of Martin, consist in the presence of the sarcina in the stomach, or was the sarcina (as Schlossberger from his cases concludes it invariably is) merely an epiphenomenon?

Let us see what lesions of the stomach experience has shown to be coincident with the occurrence of the sarcinæ. It appears from cases on record, and especially from the observations of Dr. Todd, recorded in the *Medical Gazette* of May 2, that if the food is retarded in its passage through the stomach, sarcinæ are developed there, and that thickening of the pylorus, narrowing of the pyloric orifice, and dilatation of the stomach, are the lesions most frequently found after death in such cases. Now, the pylorus is, in its healthy state, closed by muscular action. The muscular fibres by which this closure is effected, are, I need not say, of the kind termed plain, *i. e.*, they belong to the class of involuntary muscles.

Constriction of the pylorus may be organic or spasmodic. The pylorus is the seat of ulceration; the ulcer heals; contraction of the cicatrix follows; and hence stricture of the pyloric opening. The submucous tissue is the seat of the exudation of lymph, simple fibrillating or contractile lymph, or of fibro-plastic blastema; permanent stricture of the pylorus is the result; or the same tissue is the seat of cancerous infiltration, and coarctation of the same part follows. An error in diet is committed; digestion is imperfectly performed; and the pylorus, healthy in structure, refuses to allow the offending substance to pass into the duodenum. It is a well-known law of the animal economy, that increased demand leads to increased supply; that when a part is called on to perform extra duty, not only is the nutritive material carried to that part in quantity sufficient to compensate for waste, but in still larger quantities; and hence hypertrophy of the over-exercised structure ensues. This is especially true of the muscular system, and peculiarly so of the involuntary portion of that system.

Again, experience proves that when, from any cause, coarctation of the orifice leading from the hollow viscus takes place, the viscus itself frequently undergoes dilatation; whatever, therefore, interferes with the free exit of food through the pylorus, may lead to dilatation of the stomach.

Taking all these facts into consideration, it seems to me that the very presence of the sarcinæ, and of the fermenting intensely acid fluid may possibly, nay probably, (by keeping the muscular fibres that close the pylorus in constant action), be, in some cases, the cause of the organic coarctation of the pylorus and the consequent dilatation of the stomach, which are, as I tell you, so frequently the lesions found after death, where these vegetables have been detected in the vomited matter during life. But supposing that organic disease exists anterior to the development of the torulæ, and the sarcinæ, and to the secretion of the acid fermenting fluid, yet must we allow that the

irritation produced by their presence would be likely to excite spasmodic closure of the pylorus, and so add, at least, to the difficulty with which the contents of the stomach would find their way through the organically coarctated orifice; while the rapid disengagement of gas could not fail to increase the dilatation of the stomach, already over-distended by the ingesta.

Thus, then, whether the primary disease be (as, in some cases, I am disposed to regard it to be) the secretion of a fluid favourable to the development of the germs of sarcinæ, or whether the development of these bodies be the result of the retardation of the food in a dilated stomach, the consequence of a mechanical impediment to its transit through the pylorus (as in many cases I have no doubt *it is*); whether the vegetable organisms, and the fermentation which accompanies their development, be the cause or the consequence of the pyloric stricture, still must it be desirable to check their development and prevent their growth, as a means, if not of curing, at least of retarding, the progress of the organic disease.

But, allowing for a moment that our expectations could not reach thus far, yet, would it still be a gain to prevent the distension caused by the disengagement of the carbonic acid, the product of fermentation, to check the formation of that flatus, the very eructation of which is a constant source of distress to the patient. "The three symptoms"—says Dr. Walshe, speaking of cancer of the stomach—"which most torture patients, and for which they most earnestly implore relief, are flatus, vomiting, and constipation." But to return to Martin, and to the bearing of his case on the question here stated. Some years since, he suffered from mechanical violence; subsequently he had hæmatemesis, suffered from pain in the abdomen, and vomited his food often many hours after eating it; and presumptive evidence is afforded, by percussion and palpation, of dilatation of the stomach, and thickening of the pylorus. When he first came under our observation, the symptoms, according to his own and his wife's account, had continued almost unabated in intensity for many years, and certainly they were as severe three years since as they were on his admission.

The long continuance of the stomach disease (more than twenty years) without marked alteration of the symptoms, without the implication of other organs, and without any indication of the existence of constitutionally malignant disease, as well as the fact that vomiting of blood was among the earliest of the symptoms, renders the existence of schirrhus of the pylorus improbable, while it renders the existence of ulceration in the vicinity of the pylorus, cicatrisation of the ulcer, and subsequent thickening of the submucous tissue, extremely probable; but still remember, only probable. Taking, however, this view of the primary stomach disease, I cannot but think that this organic coarctation of the pyloric orifice and dilatation of the stomach, have both been increased by the presence of the sarcinæ, the torulæ, the acid fluid that, under the stimulus of their presence, is poured into the stomach in such large quantities, and the gas which accompanies their formation. I have read to you some notes, which illustrate the improvement that has taken place in our patient's condition since his admission into the hospital. Let us now see by what means that improvement has been effected.

It appears from the notes, that, from his first admission till the 5th of April, he vomited almost daily an enormous amount of thick fluid in a state of fermentation, loaded with sarcinæ and torulæ. To give you an idea of the quantity, I may mention, that, on March 16, he vomited two quarts; on the 17th, one quart; on the 19th, a pint and a half; on the 20th, one quart; on the 22nd, five pints; on the 24th, two pints and a half; the drugs given during the same three weeks were hydrocyanic acid, acetate of morphia, and sulphate of zinc. You will remember he had previously taken creosote, nitrate of silver, etc.

He now commenced to take sulphite of potash. The power exercised by the remedy has been most remarkable and most unequivocal.

Before taking it, he was vomiting daily from forty to one hundred ounces of the fluid, loaded with sarcinæ and torulæ; thus, on the first of April, he vomited one hundred ounces; on the evening of the 2nd, between seventy and eighty ounces, although he had the same morning, from the action of sulphate of zinc, vomited fifty ounces. No vomiting on the 3rd. On the 4th, in consequence of the extreme pain and sense of distension, sulphate of zinc was again administered.

On the 5th, he took ʒss. of the sulphite of potash early in the morning; in the evening he vomited. On the 6th the dose was increased to one drachm. On the 7th, he vomited twelve ounces only of acid fluid, on the surface of which there was but a small amount of scum; it contained perfect sarcinæ, but no torulæ.

From the 8th, he took three drachms of the sulphite daily, each dose being given in ʒiss. of water. At 6 A.M. on the 9th, he ejected from the stomach four ounces; the sarcinæ were now decidedly less numerous, and there were no torulæ. In the evening of the 6th he again vomited, but the vomited matters were now free from sarcinæ and torulæ, and there was no appearance of fermentation. Between the 9th and the 18th he vomited three times, but on neither occasion did the vomited matter contain sarcinæ or torulæ.

From the 16th of May to the 19th of June, the vomited matter contained no trace of sarcinæ or torulæ, and had lost its yeasty odour and appearance. *During these thirty-three days he ejected about two hundred and thirty ounces of acid fluid; during the first eight days of his residence here he ejected three hundred and eighty ounces.*

Now, gentlemen, I wish particularly to impress upon you the marked improvement that followed in this case from the cessation of the production of the sarcinæ. Coetaneous with their disappearance, the sense of distension and the terrific eructation of flatus ceased; the burning pain at the epigastrium abated considerably, and the pains which our patient described as "flashing, darting upward", vanished. By preventing the formation of the sarcinæ and stopping the fermentation, we have, then, greatly relieved his sufferings; and, allowing the existence of organic stricture of the pylorus, we have placed the patient in a much more favourable position than before, for we have removed a cause of constant spasmodic constriction of the pylorus, and have placed the stomach in a much more favourable position to resume its normal dimensions, by preventing the formation of the gas, one cause of its constant distension; and it is obvious, that if a dilated, hollow muscular viscus is to resume its normal size, it must never be allowed to become distended.

But perhaps it may be supposed that diet has assisted in removing the sarcinæ. Not at all, for Martin has had a pretty liberal supply of arrowroot, beef-tea, mutton, milk, bread, and potatoes, with two ounces of rum daily. It is true the sarcinæ return directly the sulphite of soda is omitted; but then, even though it were necessary for this man to continue its use for life, it would be no great trouble. Sulphite of soda is not more disagreeable to the palate than carbonate of soda, and is less injurious, and many take the latter daily. But I hope, by steadily pursuing its use, by the employment of unfermented bread, as to-day suggested by Mr. Graham, and by some other alterations in his diet and drugs, that ultimately he may be able to omit the sulphite entirely.

I cannot conclude without observing, that considerable benefit may be anticipated from the employment of sulphurous acid in all diseases attended with the developement of parasitic plants. I would mention porrigo especially. That it would prevent the growth of the epiphyte there is little doubt; and, should it do so, and yet not cure the disease, the question of the

relation between the two would be settled. In some forms of dyspepsia, attended with the discharge of large quantities of flatus, I think I have seen considerable benefit from its use. On the whole, I am satisfied that in the sulphite of soda we have a valuable addition to our materia medica.

Let me advise such of you as may be tempted to employ the neutral sulphites, to test them before administering them. An omission of this precaution may lead to disappointment.

Without the microscope, the vegetable bodies could not have been detected, and without the aid of the chemist the remedy for them would have been unknown. Let me add, that I have shown that more than temporary benefit sometimes accrues to the patient from the treatment of individual symptoms.

WAYS IN WHICH DEATH OCCURS.

In a series of able papers, *On the Different Ways in which Death Occurs*, Mr. B. W. Richardson comes to the following conclusions respecting *syncope*.

Syncope may arise from two kinds of derangements in the circulating machinery,—firstly, from blood being *diverted* from the heart; and, secondly, from the heart being *overcharged* with blood.

The heart does not depend for its power to act on any nervous agency, but simply on the stimulus of blood. The value of the recumbent posture in restoring animation during syncope, does not rest on the cause (so commonly believed), that during recumbency the brain is re-supplied with blood, and so the heart with nervous power, but on the fact, that when a person faints whilst sitting or standing, the heart fails to do more than to throw its blood over the arch of the aorta; and as this even is not done with sufficient force to ensure a returning venous current in opposition to gravity, the whole of the blood is allowed to accumulate in the vessels below the heart. But the patient at this point falls, or is laid down, with the upper part of the body lowest, the position of the ascending venous currents is thus entirely changed, the returning blood gravitates into the heart, and the organ re-supplied with stimulus, starts again into play, and animation returns.

This explanation affords also a key to many pathological phenomena; thus hæmorrhages from the lower half of the body are always much more dangerous than those from the upper, because in such cases the lower half of the body is a running cistern—not a reservoir of blood.

Syncope, following purgation, or the abstraction of fluids from cavities, is induced by the sudden rush of blood that takes place into the unloaded parts, the heart being thus as effectually robbed as in hæmorrhage.

Ruptures or wounds of the heart may not be followed by instant death, and this especially holds good if the wound or rupture occurs at the upper part of the organ; because in such cases, as soon as the organ gets so full as to pour out its blood through the artificial opening, contraction of the walls of the heart begins to take place, which contraction, as it expels the blood through the natural channels, closes also the rupture or wound.

Rupture of the sound heart scarcely ever occurs, except from a severe fall, in which the body alights on the feet or breech. Such falls lead to rupture of the heart or aorta, by the concussion of falling bringing down the blood that is passing through the ascending aorta, in the same way as the concussion produced by bringing the bottom of a bottle, containing a fluid or powdered substance, sharply on a hard body causes the powder or fluid to sink lower. In this way also, aneurism at the root of the aorta is accounted for, as produced by leaping, riding, and the like; here, the concussion, though not sufficient to cause a rupture, leads to a state next to rupture—viz., dilatation.

A beautiful provision against these accidents is found in inferior animals, where running, leaping, etc., are required, inasmuch as in them the circu-

lating currents from the limbs do not enter the heart perpendicularly, but through the medium of horizontal vessels, so that no amount of concussion in falling upon the feet can overwhelm the heart with an increased flow of blood upon it.

In syncope during advanced pregnancy, the danger is very great, because the recumbent position is of no avail; for the gravid uterus falling backwards on the vessels running to the heart, acts like a ligature around them.

Syncope in labour never, or at all events rarely, occurs during a pain: this, in consequence of the mechanical necessity, that by each uterine contraction a large quantity of blood previously contained in the uterus is poured back into the general circulation, by which the heart is continually supplied with stimulus.

Heat, applied to the general surface, will sometimes give rise to syncope when the heart is hypertrophied. The syncopal attack is brought on in this case from an increased temperature dilating the capillaries, into which the over-acting heart forces its blood and empties itself.

Syncope may occur from the heart being overpowered with blood, and becoming paralysed by its own efforts, in the same manner as ordinary muscles are sometimes temporarily paralysed by sudden extreme exertion. Death probably arose from syncope so induced, in those experiments on rabbits, where Sir Astley Cooper suddenly arrested the flow of blood passing through the carotid and vertebral arteries; and cases are narrated in which a tendency to syncope has followed the compression of large arteries in the human subject.

The heart may also be overwhelmed from causes acting on the venous system. Thus from the days of Harvey it has been known, that in abstracting blood from the arm, the patient often faints on the removal of the fillet. This ensues from the flood of nervous blood suddenly released, returning upon the enfeebled heart and overpowering it in a greater or lesser degree, just as in transfusion of blood after hæmorrhage the heart is liable to be overpowered, if the injected blood is thrown into the circulation with too much force. A case is also supplied to illustrate that a temporary mechanical arrest of the venous circulation in the neck, may be followed by the same effects on the obstacle being suddenly removed.

Under the head of syncope from derangements at the heart, the effects of barriers (as indurated valves, etc.) in the cavities of the heart, and the effects of shocks to the heart, are considered. Reasons are adduced to prove that barriers on the left side of the heart are most dangerous, and it is suggested that all barriers act detrimentally in two ways—firstly, by opposing the currents of the blood, and secondly, by preventing the walls of the heart from approximating closely during their contraction, thus rendering the organ unfit to adapt itself to various quantities of blood.

Among the causes which act on an *obstructed* heart to produce syncope, *exertion* is placed first by Mr. Richardson; and the doctrines of Dr. Latham concerning shocks to the heart are dwelt upon. It is shown that the cause why the heart never gets over a severe shock, as described by Dr. Latham, rests in the fact, that the heart can never rest after the shock, and so never regains full power. It may play on, but its nice equilibrium is lost.

Exhaustion of the body, and sudden changes of position, are also dwelt upon as common causes of syncope during the existence of obstructions at the heart. And lastly, an opinion is expressed, that in some states the blood during life, in the course of agitation against the valves of the heart, may deposit its fibrine. And that in the event of an indurated valve being present, a fibrinous coagulum may be suddenly deposited upon it, of sufficient size to arrest the play of the heart, and to bring on fatal syncope. A case illustrative is also supplied.—[Abstracted from *London Medical Gazette*, February 28th, March 21st, April 11th, August 8th, 1851.]

COLCHICUM IN THE COMA AND DELIRIUM OF SCARLATINA.

The paramount importance of restoring the action of the kidneys in scarlatina is fully recognised by all practitioners; but the best method of accomplishing this object is not always easily determined. We have used colchicum for the cerebral symptoms as well as for the rheumatism of scarlet fever, and we have seen both good and evil results from its action. It must be borne in mind, that in scarlatina the kidneys are in a state of excessive hyperæmia, and that to relieve this condition is a primary indication. The appropriate means will vary according to the nature of the case; but we confess that we would rather trust to large hot bran poultices to the loins, and the due exhibition of carbonate of ammonia internally, in such cases as those referred to by Dr. Hughes Bennett, than to the method he advises. The use of colchicum, however, is a proper subject of investigation and experiment. In this way, its legitimate sphere may be determined. Its conjunction with carbonate of ammonia we look on as judicious. For the sake of drawing attention to the subject, we quote the following notice by Dr. Hughes Bennett from the *Edinburgh Monthly Journal* for August 1851:—

"A boy, æt. 14, entered the clinical ward on the third day after experiencing distinct rigors. There was restless delirium, and constant moving of the head from side to side on the pillow. He was apparently conscious when spoken to, but could not answer questions; the tongue was protruded with difficulty, dry, and of bright red colour, studded with florid elevations; deglutition was much impeded—bowels open—pulse 130, weak—urine voided with difficulty, and diminished in quantity—sp. gr. 1025—not acted on by heat and nitric acid—skin hot and dry, covered with the bright red scarlatinal eruption—ordered salines and slight diuretics. He continued in the same condition, the angina, coma and alternating delirium, however, being more pronounced until the sixth day. During this period all the urine passed was carefully examined. The amount was diminished (seventeen ounces per day), but it was free from deposit, and unaffected by heat or nitric acid. ℞ Sp. æther. nit. ʒiij; pot. acet. ʒiij; tr. colchici ℥ss. aquæ, ʒiij. Ft. mist. A teaspoonful to be taken every four hours. On the following day all coma and delirium had disappeared. He answers questions when put to him—skin cool—eruption faded—pulse 96, weak—passed thirty ounces of urine, which is turbid, with small flakes of a membranous character floating in it. On the eighth day the quantity of urine excreted was fifty ounces, and it was still more loaded with sediments. On examining the urine with a microscope, it was seen to contain—1st, membranous flakes, composed of aggregated rounded particles, apparently agglutinated together, and strongly resembling some forms of vegetable tissue—2d, rounded and irregular masses with spicula—3d, amorphous molecular masses. The whole of these elements, on being analysed by Mr. Drummond, were found to consist of urate of ammonia. Next day the urine was only slightly turbid, and on the following one, was perfectly clear. From this time the boy gradually recovered.

"Commentary.—This was a very severe case of scarlatina. The angina was intense, occasionally rendering deglutition impossible. There was delirium on the third day, alternating at night with coma, which was often profound. The worst result was apprehended. It recurred to me that the head symptoms in this as in several cases of typhus, might probably depend not so much upon inflammation of the brain, as is generally supposed, as upon absorption of, and poisoning by, urea; an idea that appeared to me supported by the diminished quantity of the renal excretion, as well as its freedom from all deposit. Remembering the alleged virtues of colchicum in increasing the elimination of this excretion, I ordered it, in combination with diuretics, and the result was remarkable. For on the next day, not only had the fever diminished, but the urine was increased in amount and loaded with urates to an extent and in a form I had never previously seen. It may be argued that the fever had terminated by a natural crisis on the

seventh day; but I cannot help thinking that in this case nature was assisted by the colchicum and diuretics. At all events, this medicine seems to me worthy of more extensive trial in scarlatina accompanied by diminution of urine and head symptoms."

DR. CATHCART LEES ON VOMITING, AS SYMPTOMATIC OF DISEASE OF THE KIDNEYS.

Dr. Cathcart Lees has published, in the *Dublin Quarterly Journal of Medical Science* for August 1851, some remarks on the sympathetic vomiting which occurs in connexion with disease of the kidneys. He says that, if the vomiting be symptomatic of a calculus in the kidneys or ureter, the diagnosis is seldom very difficult, as the situation, the suddenness, and the violence of the pain, coincident with severe vomiting, generally guide to the seat of the disease. If there be disease of the kidneys without a calculus, or if the calculus cause no pain or tumour, the diagnosis is more difficult. In a case published in the *Dublin Quarterly Journal*, new series, vol. viii, p. 357, Dr. Lees states that vomiting led him to suspect the presence of a renal calculus —a diagnosis which afterwards proved correct. He believes that the vomiting in this case arose from mechanical irritation by the phosphatic crystals, the stomach participating through the influence of the splanchnic nerves.

In another case, an old woman had suffered from constant vomiting: after death, the left kidney was replaced by a large cyst, from the mouth of the ureter having been blocked up by a calculus, so as to prevent the excretion of urine. In another case of a man aged 43, admitted into the Meath Hospital under Dr. Lees, there was frequent vomiting, without sufficient evidence of gastric disease. From an examination of the urine, Dr. Lees diagnosed disease of the kidneys, most probably fatty degeneration; andt his opinion was confirmed some time after by *post-mortem* examination.

Nausea and vomiting are very frequent towards the latter periods of chronic degeneration of the kidneys; but they furnish no positive diagnosis, being met with in various renal affections. There is nothing in the nature of the matters evacuated, or in the times of vomiting, which seem likely to serve as a correct guide to the *seat* of the disease. We must therefore take into consideration the history, age, and sex of the patient, and particularly the situation to which the pain is referred; and, even with the most careful examination, we shall often be puzzled, particularly in obscure cases of vomiting connected with cerebral disease.

In the treatment of these cases of chronic vomiting, if it occurs early in the morning, when the patient is fasting, Dr. Lees finds the most successful plan to be that of making him take some light kind of food before getting up, remaining quiet for a short time afterwards. If it occurs at an early period of the disease, and particularly if pain or weight in the loins is complained of, cupping in that region to three or four ounces, affords great relief. In some cases, most satisfactory results have followed the use of equal parts of boiled milk and lime-water, given frequently during the day, especially when diarrhœa was present. In other cases, one, two, or three drops of hydrocyanic acid, with three grains of bicarbonate of soda, repeated every three hours, and given immediately before food or drink, is taken, proves useful. Creasote, in doses of one or two drops, frequently repeated, is also often of service. In one case—a young girl labouring under general anasarca, with constant vomiting and severe diarrhœa—much benefit was derived from the liquor ferri pernitratis, in five-drop doses, four times a day.

Occasionally a blister over the stomach, a little brandy, or from twenty to thirty drops of Hoffmann's anodyne liquor, will check the vomiting. Opium is objectionable, on account of the tendency to head symptoms which exist when the structure of the kidneys is deranged, and because, in many cases, it is difficult to determine whether the symptoms are caused by mere mechanical irritation or obstruction, or whether they depend on the general poisoning of the system with urea and other excrementitious substances.

SURGERY.

DIAGNOSIS OF GRANULAR AND GONORRHŒAL OPHTHALMIA.

M. Henrotay, in the *Annales d'Oculistique*, points out the distinctive marks between granular and gonorrhœal ophthalmia. He observes that it is only by local inspection, and by the progress of the case, that the nature of the affection can be decided on; for the antecedents are often deceptive. A man who has gonorrhœa may have common granular ophthalmia; and a man free from gonorrhœal symptoms, may accidentally get blennorrhagic ophthalmia.

The starting point in the diagnosis, is the *marked difference in the mode of development of the two affections*. The invasion and progress of gonorrhœal ophthalmia is very rapid; and hence it produces œdema rather than firm granulations. This character is found both in the lesions of the conjunctiva and of the upper eyelid. The swelling of this eyelid is, in fact, œdematous; its external surface presents a slightly bluish aspect. The impression made by the fingers remains for some time. It is very difficult to erect the eyelid: and, when this is effected, the mucous membrane is found to be smooth, and the ecchemosis to be serous.

In granular ophthalmia, on the other hand, the evolution of the disease is less rapid;[1] hence firmer granulations are formed. The enlargement of the upper eyelid is not altogether œdematous, but depends in a great measure on the great development of palpebral granulations. The external face of the eyelids preserves its natural colour, or is a little red. The fingers leave no mark; the eyelid is easily turned back; its internal surface is rough. The muco-pus is more creamy, and the chemosis is sanguineous.

Granular ophthalmia may last long, and become chronic; in which state, an acute attack may be occasionally brought on. Gonorrhœal ophthalmia either disorganises the eye, or gets well in a few days.

M. Henrotay says, that epistaxis is of very common occurrence in sub-acute purulent ophthalmia, but that he has never met with it in gonorrhœal ophthalmia. He does not attach much importance to the pre-auricular bubo, mentioned by M. Hairion. [Abridged from *Gazette Médicale*, 16th Aug., 1851.]

PHAGEDENIC ULCERATION OF THE VULVA.

M. Huguier presented to the Surgical Society of Paris, Oct. 1, 1851, a specimen of this form of disease, which, in his published researches, he has distinguished from other forms of ulceration with which it has been confounded.

A woman suffering under lupus of the external generative organs, had been several months under the care of M. Vernois. The usual modes of treatment had all failed; the ulceration, continuing its ravages, had destroyed all the vestibule, a part of the nymphæ, half of the urethra, and had extended to the soft parts on the pubis. Five months since, this patient came under the care of M. Huguier, who, seeing the inutility of previous treatment, and the tendency of the disease to spread, determined upon an operation. By means of a bistoury, all the disease was removed; the entire urethra was sacrificed, the incisions having been carried to the sub-pubic ligament; a part of the recto-vaginal septum was also removed. Hæmorrhage was but trifling. The cure was perfect. The loss of the urethra did not impair the functions of the bladder. Cicatrisation was complete in twenty days. Two months afterwards she had died from an iliac abscess, with caries of the bone.

M. Huguier presented the genitals of this patient; no trace of lupus

[1] This does not agree with the statement of M. Fallot, that military ophthalmia is sometimes very rapid in its course.

could be discovered; the cicatrices were perfectly healthy. M. Huguier stated that he had frequently performed the same operation with equal success. [*Medical Gazette.*]

NECROSIS OF THE CRANIAL BONES AFTER ERYSIPELAS.

M. Larrey relates the following singular case:—In a patient, 52 years of age, the scalp having become detached by suppuration, inflammation of the bone followed, and was productive of necrosis and separation of the entire bones of the arch of the skull. The patient had not presented any signs of disorder of the cerebral system, although the membranes of the brain were covered only by integument, so that the movements of elevation and depression of the brain were perceptible.

*** A parallel to this case was seen in that of a patient in Bethlehem Hospital, who, having been too vigilantly watched, to permit his executing his suicidal intentions in any other way, laid the back of his head on the fire, and completely charred the scalp, destroying the vitality of a large portion of the skull. The arch of the cranium became detached, and was deposited by Mr. Lawrence in the museum of St. Bartholomew's Hospital, while the patient was living in Bethlehem for several years with only membranous and tegumentary covering to his brain. [*Medical Gazette.*]

OBSTETRICS.

INDIAN HEMP: ITS POWER OF INCREASING UTERINE CONTRACTION DURING LABOUR.

Dr. Alexander Christison, in a series of papers upon the *Natural History, Action, and Uses of Indian Hemp*, has made a most important addition to our knowledge of therapeutic agents. He establishes its remarkable power of increasing the force of uterine contraction during labour. After subject seven cases, he makes the following remarks:—

"There can be no doubt that the *intensity* of the pains was greatly augmented by the hemp, except in the last case, where, after the effects of the first dose passed off, no action followed the repetition of it. This case was an exception to all the others.

"It is worthy of remark, that in none of these cases were the ordinary physiological effects produced; there was no excitement or intoxicating action, and there did not seem to be the least tendency to sleep in any of them.

"In conclusion, I may state what appears to be the most obvious difference between the action of ergot of rye, and that of Indian hemp. First,—While the effect of ergot does not come on for some considerable time, that of hemp, if it is to appear, is observed within two or three minutes. Secondly,—The action of ergot is of a lasting character, that of hemp is confined to a few pains shortly after its administration. Thirdly,—The action of hemp is more energetic, and perhaps more certainly induced, that that of ergot.

"There appears little doubt, then, that Indian hemp may often prove of essential service in promoting uterine contraction in tedious labours.

"More extended experience will show how far these effects may be depended on, and to what cases hemp is most applicable.

"Mode of Administration. Indian hemp may be administered in several ways. The extract, in the form of pill, produces the most gradual effect, and the disagreeable taste of the solution is avoided; but its action in this form is very uncertain. The following emulsion has been recommended:—A scruple of the extract rubbed in a warm mortar with a drachm of olive oil, to which are added half an ounce of mucilage, and seven ounces and a half

of distilled water (Bromfield). But the simplest method is to use the tincture, which should be dropped into a little water, and immediately swallowed. The water may be sweetened with sugar, or an aromatic, such as compound tincture of cardamoms, may be added. The usual strength of the tincture is three grains of the extract to a drachm of rectified spirit.

"The extract may be given in doses of one to six grains; the tincture in doses of ten to thirty drops, for ordinary purposes. Less than thirty drops is of little service in promoting uterine contractions; and greatly larger doses, as much as one or two drachms repeatedly, must be used in the treatment of tetanus, in which disease there is very great tolerance of the remedy.

STEINLEIN ON THE CONTENTS OF FATTY OVARIAN CYSTS.

Dr. Steinlein, of Zurich, has investigated the occasional formation of hairs, teeth, and pieces of bone, in ovarian cysts. They cannot be considered as the products of extra-uterine gestation, for they are met with in individuals who have not reached puberty.

The cyst is composed of several layers; an external one, formed of fibres of loose areolar tissues, irregularly disposed; another layer, in which the fibres are more regular; then a layer of elastic tissues, and finally an epithelial coat. This epithelium covers the whole internal surface, and it exhibits a great number of small isolated dull spots, contrasting with the brilliancy of the rest of the surface. On the bright portions, the epithelial cells are round and regularly disposed, while the cells in the other parts form lamellæ, laid one on the other. If the lamellæ be removed, round and regularly arranged epithelium cells are found beneath them. Most commonly, there is a small wart-like projection on these dull spots. If the epithelium be removed, an appearance is presented of highly-developed papillæ, regularly disposed. Microscopic examination confirms the resemblance to the dermis. These are the parts where the hairs are found, in a hair-follicle; sebaceous glands also open into the follicle, and there are also sudoriparous glands. This analogy in structure between the ovarian cysts and the external skin, explains the presence of fat: it is the secretion of the sebaceous follicles.

These cysts commence as small fleshy bodies, as large as a hemp-seed, occupying the situation of a Graafian follicle. At a later period, the body becomes isolated from the follicle, and is connected to it only by a pedicle, conveying blood-vessels. The sebaceous glands are soon developed; fat fills the cyst, and epithelial scales are mixed with it, as also, in time, the secretion of the sweat-glands.

In very young cysts, there are no hairs; these are first formed in the wart-like projections. They have the same structure and development as ordinary hairs; they may attain the length of four inches, and then fall off, being succeeded by new ones. This explains the number of hairs occasionally found. The presence of teeth is not at all inexplicable, when we remember that they are naturally formed from a folding-in of the external integument. The pieces of bone are not so easily explained; they may bear some relation to the osseous formations occasionally met with in the skin. [*Zeitschrift für Ratunelle Medicin*, quoted in *Gazette Médicale*, June 7, 1851.]

CONGENITAL SMALLPOX IN TWINS.

Dr. Ayer was called, in haste, to Mrs. P., and found her in great pain. On examination, the head of a small fœtus was found born. The uterine contractions were active, and its full delivery effected in a moment, attended by a feeble cry. The pains continued, a bag of fluid was felt protruding, and soon a second fœtus was expelled dead. Two separate placentæ were afterwards removed. The infants were of the size and development of six months. The living one had a dozen or more of pustules, on the face, head,

and breast; one or two were noticed on the abdomen, but none on the limbs. Three or four were good-sized, plump, and well-defined pustules of smallpox. The remainder were not so full, but evidently of the same character. This one survived its birth two hours. The dead child had no offensive odour: the abdomen was dark purple, and the cuticle quite loose. Its whole body, especially the abdomen, was marked with depressions, similar to those of variola in infants, after death. No elevations or pustules were noticed; these marks only remained.

Three weeks before the abortion, the mother, I was informed, had broken out with variola, after the usual premonitory symptoms, and had just recovered when I saw her. The disease was so mild that a physician was not called. She could not trace her miscarriage to any over-exertion, or any cause, except the attack of varioloid. Whether the mother infected the two at the same period, and the death of one caused the expulsion of both; or one had the disease first, and the second received it from him, are questions of some interest, but difficult, from the evidence, to decide. [Boston *Medical and Surgical Journal*, 18th June, 1851.]

SMALLPOX DURING THE SEVENTH MONTH OF PREGNANCY: PLUMP CHILD BORN AT THE FULL TERM.

Dr. S. F. Parcher, of E. Boston, writes as follows to the Boston *Medical and Surgical Journal*, for July 2, 1851:—

"I was called, recently, to attend a young married lady, who, I was informed, had been suffering *intense* pain for the twenty-four hours previous. I found the patient with hot skin, dry red tongue, high arterial excitement; pulse 110 per minute, full; severe pain in the head and back, and in the *seventh* month of pregnancy. Prescribed leeches to the temples, and hyd. and jalap, āā gr. x, followed with saline draught, and diaphoretics. In about thirty hours pustules made their appearance, and continued until the case assumed the appearance of genuine smallpox. She passed through the various stages favourably, and convalesced as rapidly as usual, save a slight ophthalmia, which retarded somewhat the cure, went her full time, and gave birth to a fine, plump, healthy girl, without the least appearance of its having had the disease. Vaccination had no effect upon it.

"*Query.* Can the mother, during the last months of pregnancy, go through with smallpox and not affect the child in utero? If so infected, will there not be unmistakeable evidence upon the skin? or does exclusion of light and air prevent scarring, and thereby leave a smooth surface?"

EXTRA-UTERINE PREGNANCY OF TWENTY YEARS' DURATION.

A woman, forty years of age, was suddenly seized with symptoms of internal strangulation, under which she sank. Dr. Christian, under whose care she was, discovered in the abdomen a large tumour, situate in the right iliac fossa and lumbar region. This tumour had first appeared some months after her marriage, twenty years before, at which time labour had come on at the sixth or seventh month, without any result; the movements of the fœtus had suddenly ceased, and the labour itself was arrested. After this period she had borne eight children. The autopsy showed a tumour of the size of a large ostrich's egg, enveloped in a cyst with ossified walls, except at its superior part, and enclosing a fœtus of six or seven months, as well preserved as if it had been artificially enclosed after the labour,—still having its umbilical cord fixed to the interior wall of the envelope which represented the placenta, and which was completely ossified. [*Pilad. Med. Examiner*, in *L'Union Médicale*, 15th July 1851.]

REPORTS OF SOCIETIES.

MEDICAL SOCIETY OF LONDON.

Friday, October 10, 1851.

Edward W. Murphy, M.D., President, in the Chair.

Homœopathy. This was a Special General Meeting of the Society, held for the purpose of considering the subject of medical men practising the homœopathic system of quackery. Fifty-seven fellows were present.

The following Resolutions recommended by the Council were unanimously adopted :—

i. That in the opinion of this Society, the practice of homœopathy, or the prescribing medicines in what are called "infinitesimal doses", under a pretence that they are useful in the cure of disease, is founded in palpable error, is a delusion on the part of the practitioner, a deception on the public, and manifestly dangerous to its welfare.

ii. That the Fellows of the Medical Society of London cannot honourably hold any professional communion with homœopathists.

iii. That consequently, any Fellow of this Society who shall hereafter practise homœopathy, or who shall knowingly meet in consultation any professed homœopathist, will thereby render himself unworthy of the Fellowship of this Society.

Saturday, October 11, 1851.

Edward W. Murphy, M.D., President, in the Chair.

This was the first ordinary meeting of the society. Fifty-eight fellows were present ; and also a number of visitors.

Duration of Pregnancy. By Dr. Murphy. Dr. Murphy stated, that he proposed, upon some future occasion, to bring forward the subject more fully : he, therefore, on this occasion limited himself to a mere outline of the method he had pursued, and its results. He hoped that other practitioners might aid him in the solution of the problem by adopting a similar plan. The two questions he proposed for consideration are,—Is the duration of pregnancy a fixed or a variable period ? and, if it be decided that it is variable, What are the limits of its variation ? The usual mode of calculating the term of pregnancy is by dating from the last period of the menses to the time of delivery, the gross results being corrected by deducting as many days as is supposed necessary to avoid error. Some, believing that conception may take place at any time, deduct one-half the menstrual interval ; while those who consider that conception can only take place at a menstrual period, date either from the last catamenia, or from that which should have happened, but for conception. This estimate being compared with the period of quickening, a result is obtained sufficiently accurate for ordinary practical purposes, but not precise enough for legal evidence. Other indications have, therefore, been sought for. Peculiar sensations are experienced by some women at the time of conception : some cases of this kind, described by Dr. Montgomery, would tend to fix the duration of the pregnancy at two hundred and eighty days. In other cases it has been ascertained by the date of a solitary intercourse, which, of course, fixes the date of conception ; the same period of two hundred and eighty days is, from such cases, given by Sir C. Clarke and others, and from these facts many are inclined to regard that period as the correct duration of pregnancy. To this opinion, however, Dr. Murphy does not subscribe, as these cases are comparatively few in number, and, if the rule were different, might easily form an exception to it without invalidating it. He would, therefore, call in the aid of statistics for

the solution of the problem; this he commenced some years since, at the University College Hospital, when forming a register of obstetric cases. The following method was adopted:—When a letter for attendance was applied for, an inquiry was made as to the catamenia, the age of the applicant at its commencement, its period, and its last appearance. With regard to the last question, some could only give the month, others were precise as to the date, and some were too irregular to date from. The last were excluded from the inquiry, as, for instance, some who were nursing either had no change, or a very irregular one; others had been always irregular before pregnancy, and therefore could not be depended on; and again, with others, the catamenia had evidently continued after conception: all these were excluded as the others were noted, and when delivery occurred, that also was noted, the interval between the two giving the gross duration of pregnancy, which was afterwards corrected, so as to make as near an approach to accuracy as possible. Of these cases, some time back, a table of 186 was formed. The corrections were made as follows:—If the period exceeded 280 days, and the woman had given the exact date when she was last unwell, the whole menstrual interval was deducted; so, if the whole period were 328 days, and 28 days were the menstrual interval, 300 days would be regarded as the true duration. It was considered that the woman might be in error, and it was thought safer to suppose that conception occurred just before the catamenia which had been arrested. Subsequently 280 days were regarded as the true period, and in any cases that exceed, the menstrual period is deducted, the result being presumed to be accurate. From his records of 965 cases, Dr. Murphy has formed four tables: 1st, those in which the duration of pregnancy exceeded 280 days, including 303 cases; 2nd, those that are exactly that period, including 378 cases; 3rd, those between 260 and 280 days, including 201 cases; and 4th, those below 260, including 83 cases. The 4th, or last table, he (Dr. Murphy) looks upon as instances of premature labour. From these tables he gathers that the duration of pregnancy is not a fixed but a variable period, as in the lower animals, varying, however, only within certain limits. Those limits are not yet ascertained. He regards 260 days, or 37 weeks, as the shortest period; he has attended mature infants born at that date. The longest period is yet *sub judice*, the cases in the first table being yet under examination, and requiring correction.

Saturday, October 18, 1851.

Edward E. Murphy, President, M.D., in the Chair.

Therapeutic Uses of Creasote. By B. W. Richardson, Esq. Mr. Richardson had never used creasote in true Asiatic cholera, but he had fully tested its value as an astringent, and in some cases of diarrhœa, he had never before seen half so good a remedy. The cases in which it is most useful are of three kinds: 1st. Cases of diarrhœa during ordinary epidemics, where the disorder cannot be traced to the presence of foreign matter in the intestines. 2nd. Cases where profuse diarrhœa follows the employment of purgatives, given to remove foreign matters during intestinal disorders. 3rd. Cases in which, after an acute diarrhœa, the patient continues to be troubled with frequent and sudden liquid evacuations, not attended with pain or great constitutional disorder. Creasote often succeeds when all other astringents fail; it is speedy in its action; lastly, it does not leave the bowels constipated, unless carried too far in its administration. Occasionally, during its use, it produces a dry, white, filmy state of tongue, and other symptoms of feverishness. When this occurs the remedy must not be continued longer; indeed, it is rarely required after such symptoms, the purging being usually arrested before they appear. With children the dose given must be very small, or such good results will not follow; the one-eighth, one-sixth, and one-fourth part of a drop, is sufficient for babes from one to two years of age. With adults the dose, as an astringent, is from one

and a half to two minims. Mr. Kesteven mentions the value of creasote as an astringent, and supposes that this value depends on the power which creasote has of coagulating albuminous fluids. To this it may be objected, that the quantities of the creasote employed medicinally are not sufficient to produce such coagulation in the intestines. Mr. Richardson assigned to creasote powerful diaphoretic and antispasmodic qualities, and said, that on the vascular system it rather acted as a stimulant than as a sedative. Its power in stopping vomiting depended upon the dose, which should be small. Given in its full dose, as an astringent, it sometimes *excites* vomiting, in which case hydrocyanic acid is usefully combined with it. To lessen its nauseous qualities, it is best to unite it with syrup of tolu and tincture of cardamoms, and camphor julep or water. It may also be prescribed advantageously with the preparations of either when they are indicated.

Gelatinous Polypus from the Ear—New Polypus Forceps. Mr. Harvey exhibited a gelatinous polypus which he had extracted from the ear by means of a new kind of forceps which he had invented for the purpose. He observed that in these cases it was most desirable that the morbid growth should be extracted entire; for if it was broken or otherwise injured in attempts at its removal, it gave rise to much inconvenience, and required tedious and troublesome after-treatment. The forceps which he had constructed, and which he had been in the habit of using for a long time with satisfactory results, were not dissimilar to those of Assalini, but had a somewhat longer blade, were flattened on either side, and terminated with theee rows of teeth. The foreign body was firmly grasped by these teeth, and removed by a rotary motion, the instrument admitting of that. This Mr. Harvey regarded as of great importance to the operator on the ear. It was also sufficiently small to admit of being used with a bivalve speculum in the auditory canal, the operator being thus afforded an opportunity of investigating the origin of polypi. The instrument was shown to the Society.

The Affinities and Prophylaxis of Variola. Mr. Dendy read an elaborate communication on this subject.

MISCELLANEOUS INTELLIGENCE.

Homœopathy:—London and Provincial Medical Protection and Benevolent Society. The following resolutions have been unanimously adopted:—

That in the opinion of the Committee of the London and Provincial Medical Protection and Benevolent Society, the practising of homœopathy by legally qualified medical men is calculated to excite ridicule, and thus to lower the profession in public estimation.

As one of the principal objects of this Society is to raise the tone of public feeling towards the profession, the committee feel, that by including among their members professors of homœopathy they would be directly opposing the objects of the Society.

The committee therefore decide, that any member of the profession who professes to practise, or does practise homœopathy, is ineligible to be a member of this Society. The committee are further of opinion, that they could not conscientiously employ the power of this Society in collecting monies from the public for homœopathic attendance, believing, as they do, homœopathic practice to be an entire imposture.

Homœopathy and the St. Andrew's Graduates. On Friday, October 17, the Senatus Academicus of the University of St. Andrew's met for the purpose of conferring degrees on the candidates who have passed through their examinations successfully. There were present seventeen candidates, who signed the subsequent address, which was presented to the rector. The

memorialists were courteously informed that the senate had no power to comply with their request. We are not aware whether the describer of the anatomy of Lucifer and Michael,[1] who is Mesmerist and homœopath to boot, signed the diplomas or not. But this would matter little after the admirable protest of the candidates for the degree.

"*To the Rector and Senatus Academicus, University of St. Andrew's.*

"We, the undersigned Candidates for the degree of Doctor of Medicine in this University, having understood that our diplomas will probably be signed by the Professor of Civil History, who is an avowed homœopathist, and holding as we do the opinion that the doctrines of Hahnemann are utterly irreconcilable with common sense, and with those medical tenets in which we have been educated, and which we trust will ever guide our professional career, respectfully request of the Senatus Academicus that they will adopt such measures as they may deem expedient for the purpose of preventing that desecration of our diplomas which we consider would be inflicted on them if a homœopathic signature were affixed thereto.

John Brown.	George Miller.	T. J. W. Marsh.
John Cowie.	Charles Gibson.	Alex. Scott Fogo.
H. W. Watson.	Thomas Torney.	John F. Gruie.
Edwin Humby.	John Walling.	John Pearson Nash.
N. J. Highmore.	C. D. Kingsford.	John Roulston.
Fred. Goodchild.	Robert Beales.	

"University of St. Andrew's, October 1851." [*Lancet*, 25th October.]

Homœopathy. The Faculty of Physicians and Surgeons of Glasgow, at a meeting held on the 1st September, unanimously passed the following Resolution:—

The Faculty having had their attention called to certain resolutions by the Royal Colleges of Edinburgh in reference to homœopathy, and heard the opinion of their council, to whom the matter was referred at last meeting, do now in conformity with that opinion, express their concurrence in, and approbation of, the view taken by the Royal Colleges as specially detailed in the resolutions of the Royal College of Physicians; but as none of the Fellows or Licentiates of the Faculty, so far as known to them, have hitherto professed or countenanced this system, they consider any further notice of the subject on their part in the mean time unnecessary.

Dr. Henderson of Edinburgh University. In spite of the broad hints which have been given to this Professor, he still clings to his chair. Never did a man hold a more extraordinary position. The Medical Faculty, it seems, have not the power to get rid of him: but the College of Physicians are anxious to expel him from their body, and on the fourth instant they meet to receive the opinion of council as to their possessing the power of elimination. The Medico-Chirurgical Society of Edinburgh proposes, we have heard, at its first meeting to erase his name, and the names of all homœopathic practitioners, from the roll of members.

Office Bearers of the Harveian Society for the Session 1851-52. —Presidents: Dr. J. Bird and Mr. H. Obré.—Treasurer: Dr. J. Ridge.—Honorary Secretary: Dr. R. H. Powell.—Members of Council: Dr. Chowne, Dr. R. Quain, and Mr. H. B. Norman; *ex officio* members inclusive.

New City Lunatic Asylum. The City authorities are about to erect a Lunatic Asylum expressly for the poor of the city of London.

New Infirmary, Torbay. The building—a very handsome one—is so far completed as to afford accommodation for the meetings of the Managing Committee.

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[1] Dr. Macdonald has described the Anatomy of Angels.

General Hospital at Birmingham. On Friday, October 3, an investigation was commenced into certain charges brought by Mr. Gutteridge, one of the Life Governors of the Birmingham General Hospital, against Mr. Alfred Baker, one of the surgeons to the institution. The Earl of Dartmouth was in the chair. The charges were, that Mr. Baker had operated on a patient for ovarian dropsy, without informing her of her risk, and contrary to the opinion of his colleagues; that he had rashly and cruelly tied the carotid artery, and thereby killed the patient, in a case of supposed aneurism of the arteria innominata in an old man: that he had amputated a boy's leg at the hip-joint, instead of at a safe part below. The investigation lasted during seven days, much evidence being called on both sides; and terminated in the drawing up of a report by the Weekly Board, in which they perfectly exonerated Mr. Baker from all the charges brought against him by Mr. Gutteridge. In closing the report, they expressed their "strongest condemnation" of Mr. Gutteridge's conduct, in publishing his attack on Mr. Baker in the form of a pamphlet, before consulting the Weekly Board on the subject of the alleged professional misconduct of that gentleman. They concluded by recording their unanimous opinion, that "Mr. Baker is entitled to retain the full confidence of the governors and subscribers." The whole of the investigation is reported in the *Birmingham Mercury*, for Oct. 18th.

Queen's College, Birmingham: Fellowships. The Queen's College, at Birmingham, has recently obtained powers, under a supplemental charter, to elect as fellows of the college such of its members as may distinguish themselves during their studies, and who subsequently obtain a diploma in medicine or surgery, or become graduates in medicine, law, or arts. The authorities of the college intend to confer this honour, in the first instance, upon such of the earlier members of the institution (the Royal School of Medicine), as the Principal and Council may determine to be eligible; and in accordance with the provisions of the charter, Dr. Roden, of Kidderminster, and Dr. Barker, of Bedford, have been elected fellows of the college. These, with Mr. G. B. Masfen, a Warneford medallist, and resident medical officer of the Stafford Infirmary, are the first three members of the profession selected for this distinction under the new charter. Amongst other privileges the fellows are entitled to vote at all meetings of the governors, to free admission to the medical and general libraries, to the museums, dissecting room, to the lectures of the professors, and to dine in the college hall.

APPOINTMENTS.

Hancock, Henry, Esq., Lettsomian Lecturer on Surgery to the Medical Society of London, in room of Mr. Guthrie, whose term of office had expired.

Ogle, Dr., has been appointed Regius Professor of Medicine at Oxford, in room of Dr. Kidd, deceased.

Pereira, Dr., elected Physician to the London Hospital, in room of Dr. Frampton, resigned.

Winslow, Forbes, M.D., Lettsomian Lecturer on Medicine to the Medical Society of London, in room of Dr. G. O. Rees, whose term of office had expired.

OBITUARY.

Baron, John, M.D., F.R.S., at an advanced age, at St. Margaret's Terrace, Cheltenham, on 2nd October. Dr. Baron was the friend and able biographer of Jenner.

Roe, G. C., M.D., Inspector General of Hospitals, at Madras, on 4th September.

BOOKS RECEIVED.

Bayes on Nervous Affections. London: 1851. Bowman (Wm, F.R.S.) Introductory Address delivered at King's College, London, 1st October, 1851. pp. 32. London: 1851. Bradshaw's Companion to the Continent. [By Edwin Lee.] pp. 408. London: 1851. Carpenter (William B.) Manual of Physiology. *2nd Edition.* pp. 616. London: 1851. Cooper (Bransby B.), Lectures on Surgery. 8vo., pp. 964.

London: 1851. Cullen on the Climate of Sidmouth. *Pamphlet, with Tables.* Sidmouth: 1851. Durand-Fardel. Eaux de Vichy. pp. 235. Paris: 1851. Gairdner (Dr. W. T.) on Bronchitis. pp. 82. Edinburgh: 1851. Symonds on Sleep and Dreams pp. 90. London: 1851. Symonds on Orthodox Medicine. Worcester: 1851. Whitehead on Hereditary Diseases. pp. 351. London: 1851.

TO CORRESPONDENTS.

To the Editor of the London Journal of Medicine.

Sir,—I felt so highly gratified on a perusal of your generous notice of my forthcoming *Lexicon* in the Journal for this month, that I trust you will bear with me in thus expressing my hearty thanks for your liberality. The immediate effect has been an addition of names to my subscription list.

My power to escape from professional duties is at present very limited. Hence the favour conferred by your kind recommendation, and the saving of time and toil effected by the ready cooperation of those who have acted upon it, are greater than can well be supposed.

Again offering grateful acknowledgement to you, and to those you have influenced, I am, Sir, your obliged,

Leeds, 16th October, 1851. R. G. Mayne.

Dr. Dundas' Paper on Quinine in Continued Fever appeared in a recent number of the *Medical Times.*

Dr. Grigor's note has been received; and his request shall be complied with.

Mr. Everest's Sermon: Free Kirk Preachers. A Scottish correspondent wishes us to publish facts regarding certain mystical preachers in the Free Kirk, who espouse homœopathy from house to house, and teach other kindred follies of German origin. We do not feel that it is within the province of this Journal to enter upon such matters; but if the rumours regarding the homœopatic dealings of the Rev. J. Wright of Nenthorn, be so current as stated to us, there is an ecclesiastical tribunal not likely to flinch from an inquiry into their truth or falsehood. We beg to inform our correspondent that Mr. Everest's Sermon is published (price one shilling) by Aylott and Jones, 8, Paternoster Row. Ample specimens of this production have already been laid before our readers. [*Vide* p. 872-874.] His Letter to Dr. Cormack is nearly as striking an example as the Sermon, of the impious and raving character of homœopathy. At p. 11 of the *Letter* we read as follows:—"What is the law of cure? What is the formula for it? What is the general expression for it? Is there no such thing? From the highest point to which balloon ever reached, fling forth a stone into space, and I will give you an expression by which you may find its place to a foot at any moment of its fall. $S = m\,T^2$. So the Almighty does His work. Now, Dr. Rose Cormack, how do you do yours? Produce your rule!"—No better idea can be formed, by a disciplined mind, of the impiety and absurdity of homœopathy than by a perusal, (without note or comment), of the *Organon* of Hahnemann and the writings of Mr. Everest, his friend and chief apostle; especially, when it is borne in mind, that the last production of Mr. Everest has been much lauded, and heartily adopted by the *Homœopathic Times*, the weekly organ of the Quins, the Hendersons, the Calvert Hollands, and the Ransfords. Mr. Everest wishes to know where such "naughty words" as *lie* and *blasphemy* can be found: he cannot fancy where a "clergyman's son" learnt them: but he ought to have known that these terms are often used in a very plain-dealing book called the Bible, *where a lie is called a lie, and where blasphemy is called blasphemy.* Surely a clergyman ought to be as well acquainted with this book as a clergyman's son. We had intended to review Mr. Everest's Sermon and Letter, but from the abundance of scientific matter now before us it is impossible for us to do more than call attention to them, as exhibiting the worst phase of homœopathy,—as showing that it is now preached as a doctrine of the Bible by clergymen of the English Church, without any episcopal interference. Our colleges may be shamefully remiss in repudiating error; but they are fully equalled in laxity of doctrine and want of discipline by the Bishops. The heretical *isms* in the Church, are at least as numerous as our charlatanic *pathies;* and the proverb—"*doctors differ*"—is quite as applicable to clergymen as to physicians.